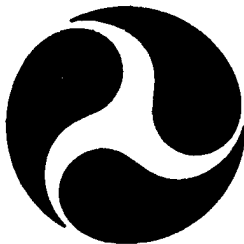
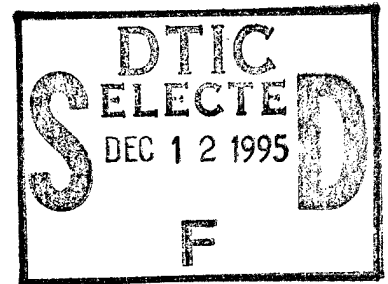


Report No. CG-D-38-95

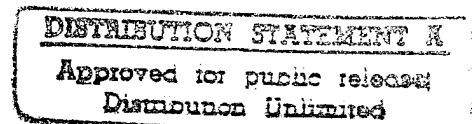
Fire Performance of Three Wired Glazed Window Assemblies

Arthur J. Parker

Southwest Research Institute
San Antonio, Texas



Final Report
October 1995



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Prepared for:

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1082 Shennecossett Road
Groton, CT 06340-6096

and

U.S. Department of Transportation
United States Coast Guard
Office of Engineering, Logistics, and Development
Washington, DC 20593-0001

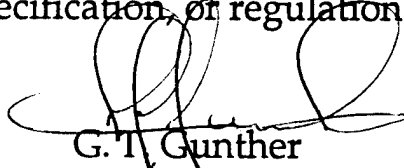
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Technical Director, Acting
United States Coast Guard
Research & Development Center
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16. Abstract Three window assemblies, described herein, were tested in accordance with the standard procedures outlined in IMO Res. A.517 (13), "Fire Test Procedures for 'A', 'B' and 'F' Class Divisions." The primary purpose of performing these tests was to determine the radiative heat flux and temperature measurements on the surface of the bulkhead when subjected to fire conditions. In all three tests, the wire glass melted and fell out of the test frame prior to the end of the 60-minute fire exposure period. The peak heat flux recorded from the unexposed surface of the assemblies was approximately 48 kW/m ² with cumulative fluxes at 37 minutes of approximately 60 MJ/m ² . Indicated surface temperatures on the panes approached 750° C, while the steel framework showed surface temperatures of approximately 550° C.					
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
in	inches	* 2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
AREA				
in ²	square inches	6.5	square centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	square kilometers	km ²
	acres	0.4	hectares	ha
MASS (WEIGHT)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
VOLUME				
tsp	teaspoons	5	milliliters	ml
tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft ³	cubic feet	0.03	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (EXACT)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

* 1 in = 2.54 (exactly).

Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.5	acres	
MASS (WEIGHT)				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	0.125	cups	c
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (EXACT)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F

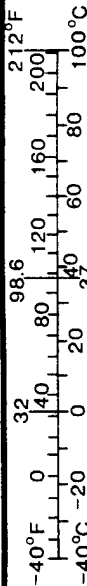


TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	TEST PROCEDURE	2
3.0	TEST ASSEMBLY	4
4.0	TEST RESULTS	4
4.1	Test No. 1	4
4.2	Test No. 2	5
4.3	Test No. 3	6
5.0	CONCLUSIONS	9

APPENDIX A--CONSTRUCTION DRAWINGS AND MATERIALS INFORMATION

APPENDIX B--HEAT FLUX TRANSDUCER CALIBRATION INFORMATION

APPENDIX C--PHOTOGRAPHIC DOCUMENTATION

APPENDIX D--TEMPERATURE, HEAT FLUX, AND PRESSURE DATA

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LIST OF TABLES

Table 1.	Points On The Time/Temperature Curve	1
Table 2.	Visual Observations - Test No. 1	5
Table 3.	Visual Observations - Test No. 2	6
Table 4.	Visual Observations - Test No. 3	7
Table 5.	Peak and Total Heat Flux Recorded at 37 Minutes	8

1.0 INTRODUCTION

This report describes the testing and analysis of three window assemblies, and includes descriptions of the test procedures followed, the assembly tested, and the results obtained. The results presented apply only to the material tested, in the manner tested and not to any similar materials or material combinations.

The IMO Res. A.517 (13), "Fire Test Procedures for 'A', 'B,' and 'F' Class Divisions" is intended to evaluate the duration for which the described assembly will contain a fire, or retain its structural integrity, or display both properties dependent upon the type of assembly involved during a predetermined fire test exposure.

The test exposes a non-loadbearing, vertical glazed element to a standard fire exposure controlled to achieve specified temperatures and pressures throughout a given time period. Points on the standard time/temperature curve are shown in Table 1 and are used to control the fire exposure.

TABLE 1.1 POINTS ON THE TIME/TEMPERATURE CURVE

TIME	TEMPERATURE
0:00 minutes	20°C (68°F)
05:00 minutes	576°C (1069°F)
10:00 minutes	679°C (1254°F)
15:00 minutes	738°C (1360°F)
30:00 minutes	841°C (1546°F)
60:00 minutes	945°C (1733°F)

IMO Res. A.517 (13) is designed to determine the thermal endurance of several classes of decks and bulkheads. The current revision of this procedure does not specifically address window requirements. The procedures and acceptance criteria, however, have been similarly applied to an "A" class door. Temperature measurements are to be recorded on the unexposed surface of the door. The duration of the test is a minimum of 60 minutes for an "A" class division, with the rise of temperature limited for the stated time period. Observations and criteria are applied for the structural integrity, smoke or hot gas penetration (cotton pad test), and maximum deflections.

This procedure measures the assembly's response to exposure in terms of the transmission of heat and hot gases through the assembly. The insulating value of the specimen should be such that the average temperature reading of the thermocouples (TC's) on the unexposed surface will not rise more than 139°C above the initial temperature, nor will the temperature at any one point on the surface, including any joint, rise more than 180°C above the initial temperature, during the time specified. These temperature rise requirements should not be exceeded during the specified time period according to the following desired ratings:

"A-60" Standard	60 minutes
"A-30" Standard	30 minutes
"A-15" Standard	15 minutes
"A-0" Standard	0 minutes

Heat flux (HF) measurements were performed to determine the levels of radiation coming through or from the assembly during the fire exposure. The procedures for the heat flux and temperature measurement are presented in Thermal Radiation From Marine Bulkheads, SwRI Final Report No. 01-4580, April 1993. Furnace pressure measurements are required to assure that the test specimen maintains a positive pressure with respect to ambient over the upper two-thirds of the assembly.

Also specified was a hose stream test after successful completion of the 60-minute fire exposure period. The hose stream test was not conducted as all three test assemblies lost their structural integrity prior to 60 minutes.

2.0 TEST PROCEDURE

SwRI's vertical furnace is capable of exposing a maximum test specimen of 3.8 x 3.8 m (12.5 x 12.5 ft). The 0.76-m (30-in.) deep furnace is equipped with nine premixed air/natural gas burners symmetrically placed across the back wall and controlled by a variable air-gas ratio regulator. View ports are located on both sides of the furnace to allow observation of the surface exposed to the flame.

The conduct of the fire test was controlled according to the standard time/temperature curve, as indicated by the average temperature obtained from the readings of five TC's symmetrically located across the face of the specimen 100 mm (4 in.) away. The TC's consisted of a bare bead supported by a ceramic insulator and steel tube such that the bead extended 25 mm (1 in.) from the end of the insulator. During a test, the furnace temperature is controlled such that the area under the average time/temperature curve is within ± 15 percent during the first 10 minutes of the test, within ± 10 percent of the corresponding area under the standard time/temperature curve during the first half hour, and within ± 5 percent for any period after the first half hour. At any time after the first 10 minutes the mean furnace temperature should not differ from the standard curve by more than $\pm 100^{\circ}\text{C}$.

Temperatures of unexposed surfaces were measured with 0.5 mm (0.02 in.), Type "K" (Chromel-Alumel) TC's, brazed to a copper disc 12 mm (0.45 in.) in diameter and 0.2 mm (0.008 in.) in thickness. The disc was covered with a 30 x 30 x 2-mm (1.2 x 1.2 x 0.08-in.) thick pad having a density of $900 \pm 10 \text{ kg/m}^3$. The pads were firmly attached to the surface. Nine TC's were bonded to the glass surface using a sodium silica 40 solution adhesive thickened slightly with Syloid 244FP powder. Two additional TC's were fastened to the mullions and held in place with small clips impaled on steel weld pins adjacent to the pad. Temperature readings were taken at appropriate locations on the unexposed surface and monitored continuously throughout the test. Thermocouple locations are shown in Figure A-1 of Appendix A.

Heat flux measurements were accomplished with transducers of the Schmidt-Boelter type from Medtherm Corporation. Five transducers were located approximately 1.5 m (0.46 ft) from the surface of the bulkhead. Three had a view angle of 30° (total heat flux), while the other two had a view angle of 60° (one total heat flux, the other radiative heat flux). The arrangement and procedures are further discussed in Thermal Radiation From Marine Bulkheads, SwRI Final Report No. 01-4580.

Three 30° circular view total heat flux transducers viewed the upper, middle, and lower third of the bulkhead (labeled Rad Nos. 1, 2, and 5, respectively). The size of the panes was such that the three transducers viewed only the panes and did not include the steel framework. The remaining two 60° view transducers viewed the middle of the bulkhead (labeled Rad Nos. 3 and 4). Rad No. 3 was also a total heat flux transducer, while Rad No. 4 was a radiation pyrometer with a sapphire window. All the transducers were calibrated to indicate incident heat flux. The layout of the transducers can be found in Figure A-2 of Appendix A. Calibration information for the heat flux transducers is contained in Appendix B.

3.0 TEST ASSEMBLY

Each of the three window bulkhead assemblies consisted of a typical commercial window framework of 16 gage mild steel. The window panes consisted of 6-mm (0.25-in.) polished wire glass with the wire forming a diamond pattern supplied by Anemostat Door Products located in Carson, California. A total of nine panes were used in each assembly. The panes were installed in the framework and held in place with glass stops on the unexposed face. The size distribution of the nine panes can be found in the construction drawings located in Figure A-3 of Appendix A. A strip of closed cell PVC tape (Norton 990), 3 mm (0.12 in.) thick x 10 mm (0.39 in.) wide, was placed between the pane and the metal framework on both sides of the pane for Test Nos. 1 and 2. In Test No. 3, the PVC tape was not installed. The glass stops were re-positioned to pinch the window panes against the framework.

The overall dimensions of the window bulkhead were 2,489 x 1,956 mm high (98 x 77 in. high). The bulkhead was installed in one of SwRI's test frames. The test frame was then placed on SwRI's vertical furnace. The bulkhead/window assembly was then exposed to the heating conditions prescribed in the standard for a one-hour period. The furnace pressure was continuously recorded at the three-fourths height of the bulkhead for each test. Complete photographic documentation of the assemblies can be found in Appendix C.

4.0 TEST RESULTS

4.1 Test No. 1

The first bulkhead test was conducted on May 26, 1993, at approximately 10:50 a.m., with Mr. Louis Nash of the U. S. Coast Guard present to witness all three tests. The TC connections were verified and the furnace burners ignited to begin the 60-minute fire exposure test. The ambient temperature at the beginning of the test was 28°C. Visual observations recorded during the test are presented in Table 2.

Table 2. Visual Observations - Test No. 1

Time (min:sec)	Observations
00:40	All panes of glass beginning to crack
01:24	Light smoke escaping from around window edges
03:19	Mid span of test frame bowed towards the furnace approximately 25 mm (1 in.)
07:43	Smoke escaping from top two-thirds of window test frame
15:18	Smoke decreasing to only light wisps
38:50	Bottom middle pane beginning to distort All other panes beginning to only slightly distort
40:10	Middle pane bubbled out and fell out of test frame
41:24	End of test

The peak heat flux prior to the end of the test was approximately 71 kW/m². Due to the range of the heat flux readings, the cumulative flux was calculated based on the highest indicating heat flux transducer, in this case Rad No. 2. This varies slightly from the previous reference (Thermal Radiation From Marine Bulkheads, 1993) where the cumulative flux was calculated during those tests based on the average flux of Rad Nos. 1, 2, 3, and 5. The total cumulative heat flux (for Rad No. 2) at the end of the test was approximately 70 MJ/m². Rad No. 4 was lower than the others, which is consistent with the usage of the sapphire window. Indicated surface temperatures on the panes approached 730°C, with the indicated temperature on the steel frame being approximately 540°C. Temperature and heat flux data for Test No. 1 can be found in Appendix D.

4.2 Test No. 2

The second bulkhead test was conducted on May 26, 1993, at approximately 2:45 p.m. The TC connections were verified and the furnace burners ignited to begin the 60-minute fire exposure test. The ambient temperature at the beginning of the test was 37°C. Visual observations recorded during the test are presented in Table 3.

Table 3. Visual Observations - Test No. 2

Time (min:sec)	Observations
00:30	All panes of glass beginning to crack
01:28	Very light smoke escaping around edges of window panes due to PVC tape
06:50	Smoke intensity increasing
08:19	Moderate amounts of smoke escaping from top two-thirds of test assembly
09:14	PVC tape intermittently burning, approximately 1-second durations, on the exposed face of the test assembly
33:35	Top middle pane of glass beginning to melt
34:10	Middle pane of glass bubbling outward approximately 25 mm (1 in.)
35:48	Top middle pane of glass bubbling outward at top
36:52	Top middle pane of glass starting to fall out of frame
37:46	Top middle pane of glass has completely fallen out of test frame End of test

The peak heat flux at the end of the test was 48 kW/m^2 , with a total cumulative heat flux (for Rad No. 2) of 64 MJ/m^2 . The cumulative heat flux curve was based again on Rad No. 2, although Rad No. 5 was very close in magnitude throughout the test. Indicated surface temperatures on the panes approached 730°C , with the indicated temperature on the steel frame being approximately 550°C , as was observed in Test No. 1. Temperature and heat flux data for Test No. 2 can be found in Appendix D.

4.3 Test No. 3

The third bulkhead test was conducted on May 27, 1993, at approximately 2:45 p.m. The TC connections were verified and the furnace burners ignited to begin the 60-minute fire exposure test. The ambient temperature at the beginning of the test was 28°C . Visual observations recorded during the test are presented in Table 4.

Table 4. Visual Observations - Test No. 3

Time (min:sec)	Observations
00:44	All panes of glass beginning to crack
03:45	Light smoke escaping from the edges of the window frame
13:46	Mid span of test frame bowed towards the furnace approximately 12 mm (0.5 in.)
15:57	Smoke intensity decreasing, only light wisps of smoke visible
40:00	Middle pane beginning to sag and deform at edges
46:56	Top middle large pane bubbling outward approximately 25 to 50 mm (1 to 2 in.) Right side panes (top and middle) also bubbling outward
48:00	Top edge of middle pane falling into furnace
48:30	Middle pane has folded (in half) onto itself Top right pane falling out of frame Middle right pane beginning to fall out of frame on top edge End of test

The peak heat flux at the end of the test was 57 kW/m², with a total cumulative heat flux (for Rad No. 2) of 92 MJ/m². Again, Rad No. 3 was lower than the 30° transducers due to the added view including the cooler steel. Rad No. 4 was the lowest, as expected, due to the sapphire window and the wider view. Indicated surface temperatures on the panes approached 760°C, with the indicated temperature on the steel frame being approximately 585°C. Temperature and heat flux data for Test No. 3 can be found in Appendix D.

Table 5 summarizes the peak heat flux and integrated radiated heat flux recorded up to 37 minutes for each of the total flux transducers during the three tests. Due to the varied termination points for the three tests, 37 minutes was chosen as a reference time to compare heat flux levels. From the geometry, Rad Nos. 1, 2, and 5 viewed similar areas, thus the recorded fluxes and integrated fluxes should be similar. The integrated or cumulative radiated energy of Rad No. 3 was approximately 10 to 15 percent lower than the other heat flux transducers because the view area included the cooler steel framework.

Table 5. Peak and Total Heat Flux Recorded at 37 Minutes

Test	Rad No.	Peak HF @ 37 Min (kW/m²)	Total Radiated Energy @ 37 Min (MJ/m²)
1	1	41.7	52.6
	2	45.1	57.0
	3	38.8	48.2
	5	43.9	55.0
2	1	45.9	56.8
	2	48.4	60.2
	3	42.4	51.1
	5	45.6	56.8
3	1	41.8	51.2
	2	46.1	55.6
	3	40.1	47.5
	5	44.6	53.2

Although the surface TC's were included for consistency with similar tests, it should be noted that the TC did not necessarily record an accurate surface temperature. This is due to the fact that the TC was receiving heat energy from the panes and the furnace being radiated through the glass and absorbed on the surface of the copper disk.

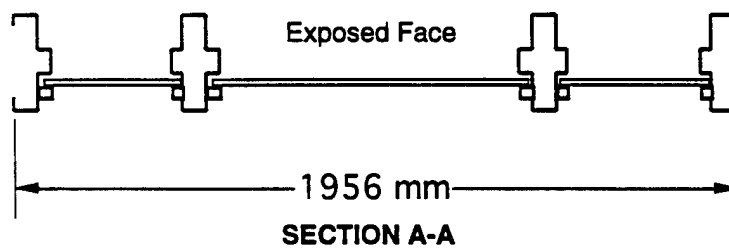
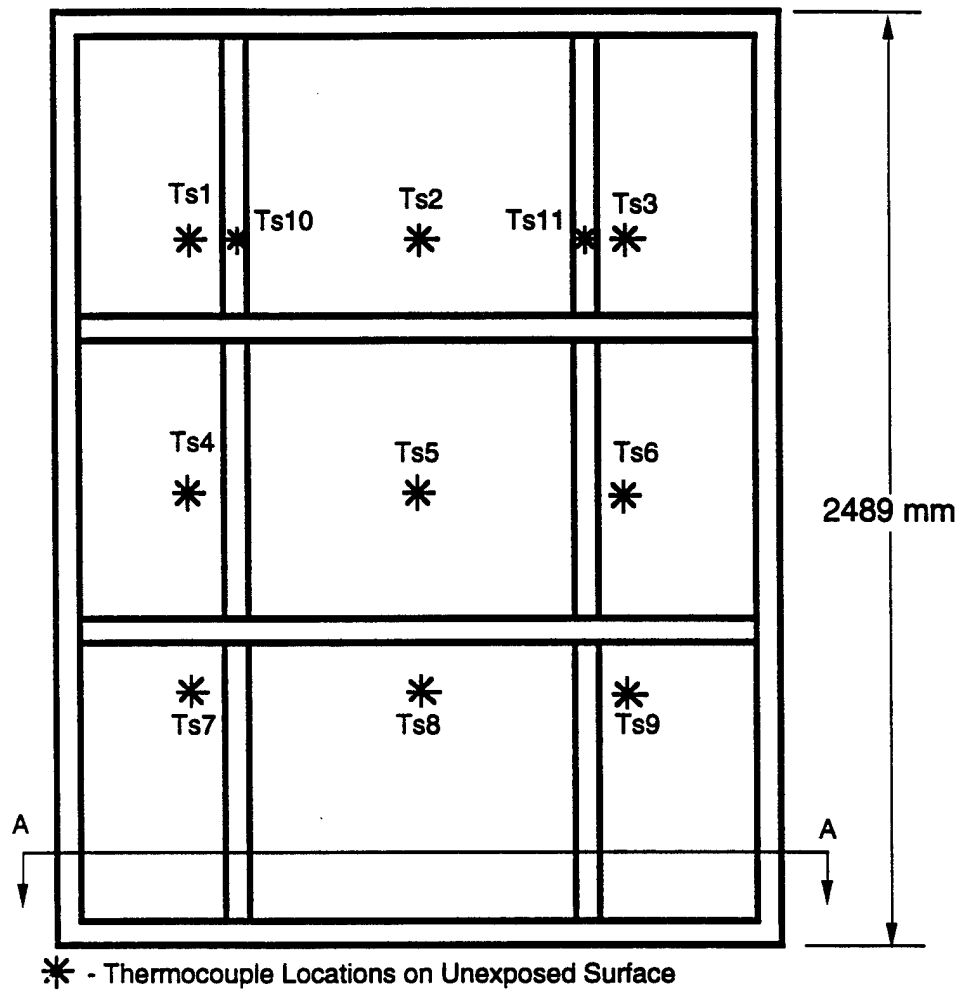
As the window panes began to reach their melting point and flow out of the test frame, the recorded heat flux levels showed obvious increases. In all three tests, the recorded heat flux increased approximately 5 to 7 kW/m² until the wire glass fell out of the test frame and the test was terminated. Correspondingly, the cumulative heat flux also showed a rise as the window assembly failed. It is interesting to note a subtle jump in the graphs of the surface heat flux approximately five minutes prior to failure. This increase may be attributed to the wire glass changing state and allowing an increased amount of radiative transmission through the assembly.

5.0 CONCLUSIONS

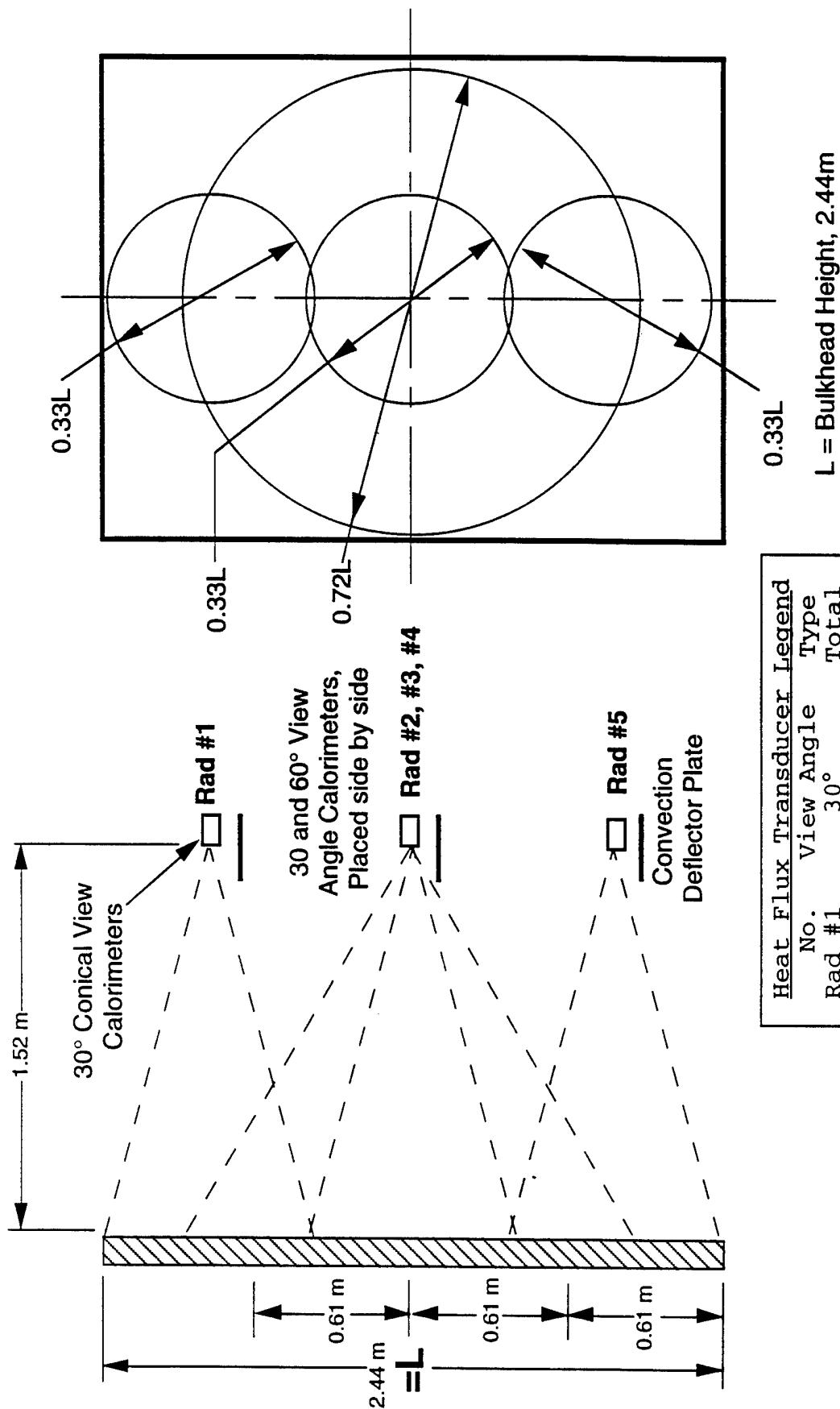
Three window assemblies, described herein, were tested in accordance with the standard procedures outlined in IMO Res. A.517 (13), "Fire Test Procedures for 'A', 'B,' and 'F' Class Divisions." Since the integrity of the window assemblies was not maintained during the entire exposure period, none of the assemblies have met the requirements for a Class A-0 window assembly. The primary purpose of performing these tests was to determine the radiative heat flux and temperature measurements on the surface of the bulkhead when subjected to fire conditions. Peak heat fluxes recorded from the unexposed surface of the assemblies were approximately 39 to 48 kW/m² with cumulative fluxes at 37 minutes of approximately 48 to 60 MJ/m². Indicated surface temperatures on the panes approached 750°C, while the steel framework showed surface temperatures of approximately 550°C.

APPENDIX A

CONSTRUCTION DRAWINGS AND MATERIALS INFORMATION

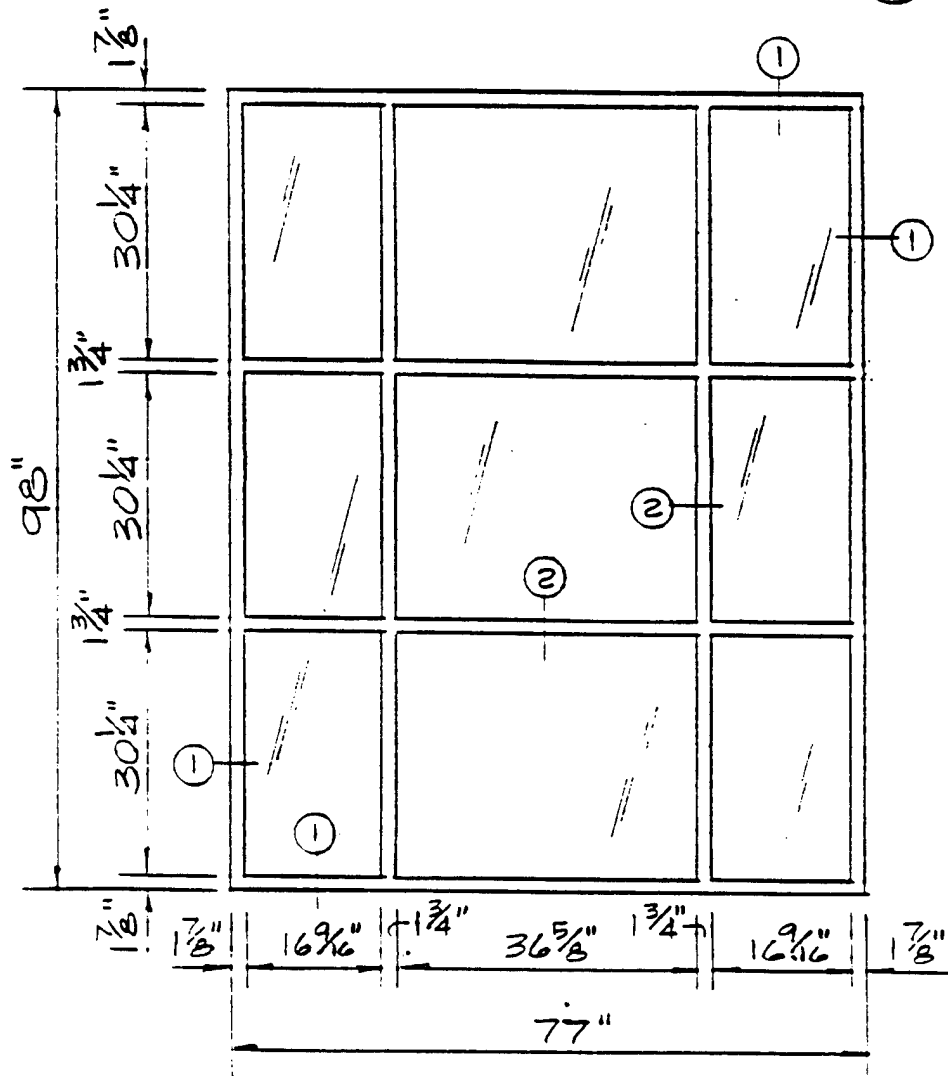
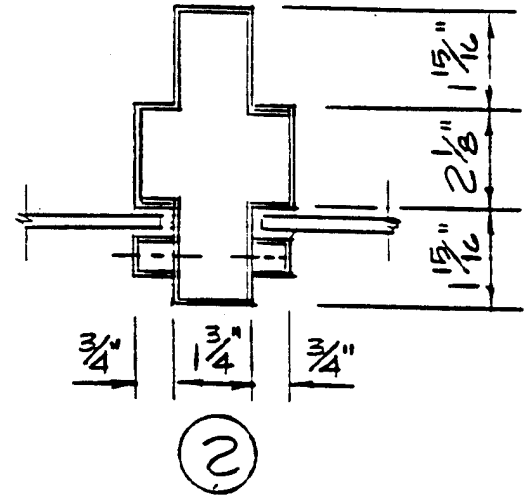
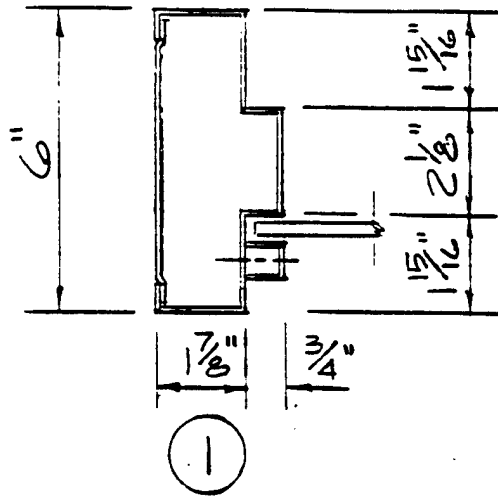


**Bulkhead Construction,
with Surface Thermocouple Locations (Ts1-11)**



Heat Flux Transducer Legend		
No.	View Angle	Type
Rad #1	30°	Total
Rad #2	30°	Total
Rad #3	60°	Total
Rad #4	60°	Radiative
Rad #5	30°	Total

Heat Flux Transducer Locations with Respect to Bulkhead



WINDOW FRAME ELEVATION

APPENDIX B

HEAT FLUX TRANSDUCER CALIBRATION INFORMATION

AS RECEIVED CALIBRATION
CALIBRATION PER MEDTHERM PROCEDURE No. PI-20, APPENDIX 1

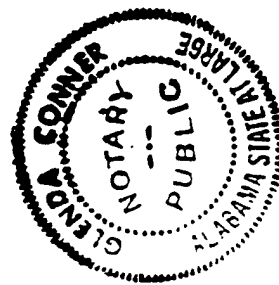
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CUSTOMER Southwest Res.
CUSTOMER P.O. 56536

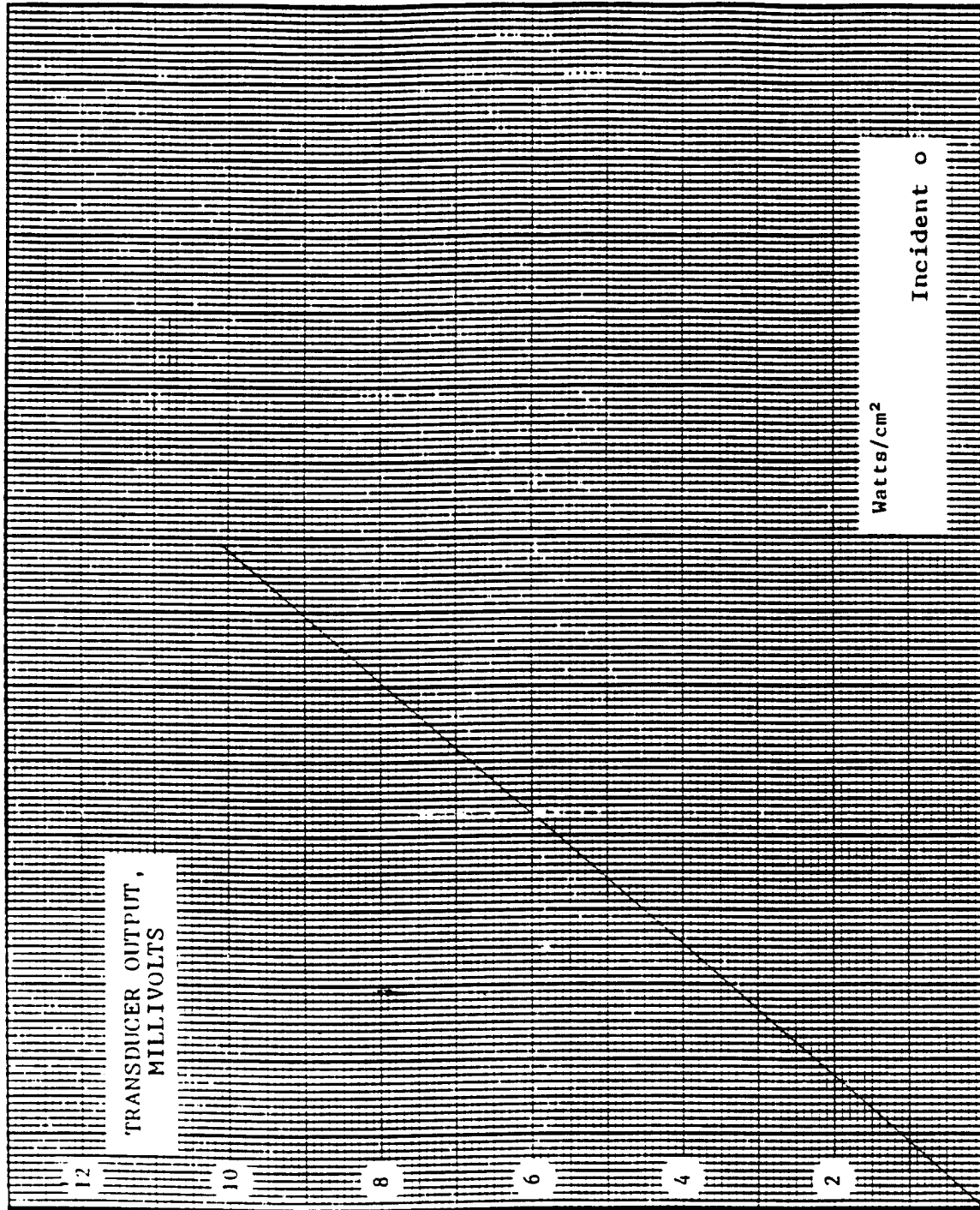
MODEL NO. 64-1-18K/VRM-30
SERIAL NO. 74047
ABSORPTIVITY 0.97
WINDOW TYPE None
SENSOR - SCHMIDT-BOELTER
REFERENCE STANDARD 238420
TESTED BY FB
QC ACCEPTANCE TEST

CERTIFIED CALIBRATION
NO. 2
SUBSCRIBED AND SWORN TO
BEFORE ME THIS 21st DAY
OF Dec. 19 92

Glenda Conner
Glenda Conner



**MEDTHERM
CORPORATION**



9.61mv at 17 Watts/cm²

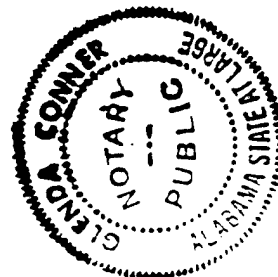
HEAT FLUX

POST OFFICE BOX 412 / HUNTSVILLE ALABAMA 35804 / TELEPHONE (205) 837-2000

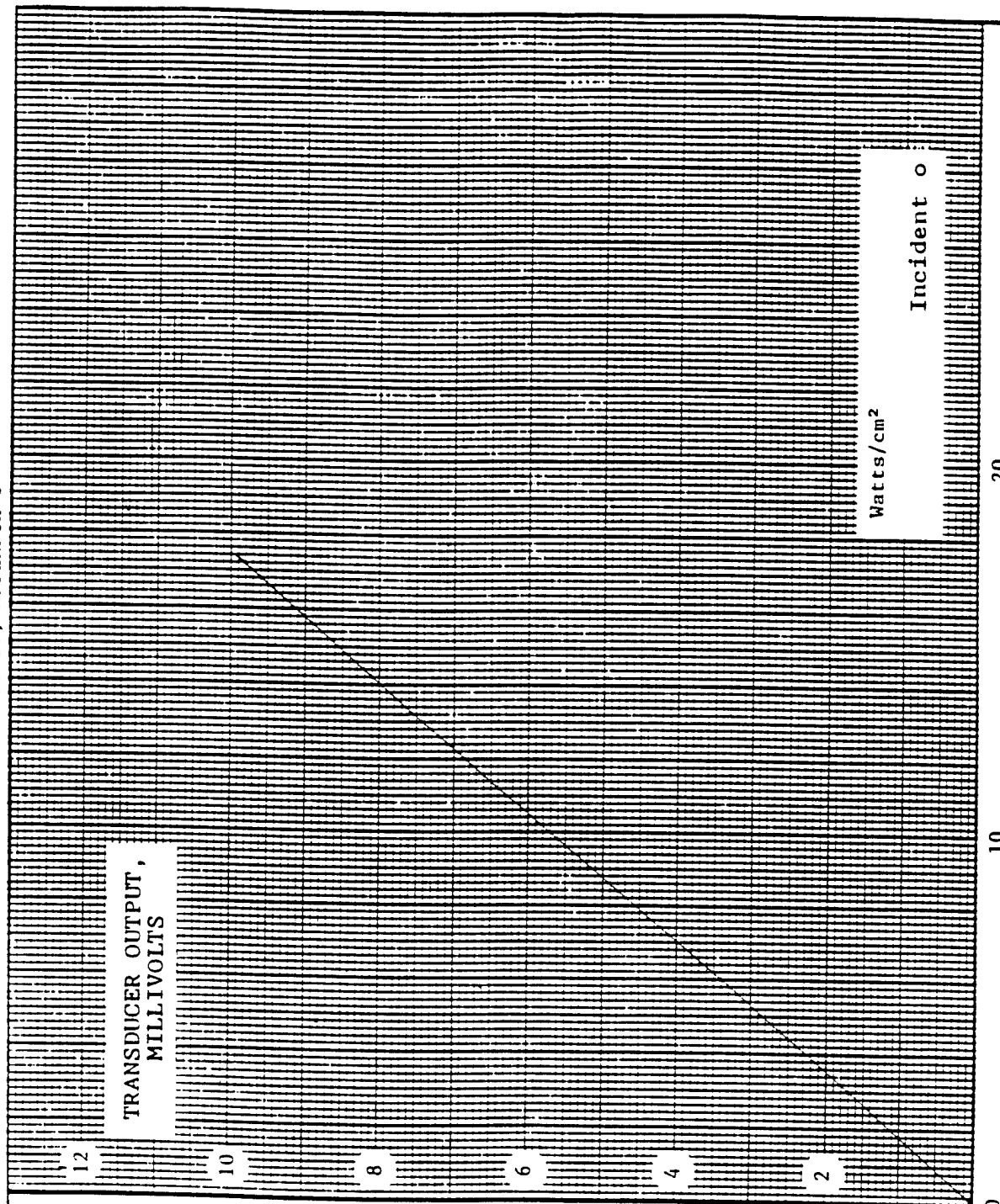
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 ABSORPTIVITY 0.97
 WINDOW TYPE None
 SENSOR - SCHMIDT-BOELTER
 REFERENCE STANDARD 238420
 TESTED BY FB
 QC ACCEPTANCE ACCEPTED

CERTIFIED CALIBRATION NO. 2
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 BEFORE ME THIS 21st DAY
 OF Dec. 19 92
Glenda Conner
 Glenda Conner



MEDTHERM CORPORATION

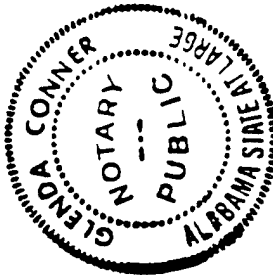


HEAT FLUX

CERTIFICATE OF CALIBRATION

DATE 12/21/92
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 CUSTOMER P.O. 56535
 MODEL NO. 64-5SB-18K
 SERIAL NO. 78802
 ABSORPTIVITY 0.96
 WINDOW TYPE None
 SENSOR - SCHMIDT-BOELTER
 REFERENCE STANDARD 325732
 TESTED BY FB
 QC ACCEPTANCE TEST
 MEDTHERM NO. 2
 INSPECT NO. 2

CERTIFIED CALIBRATION
 SUBSCRIBED AND SWORN TO
 BEFORE ME THIS 21st DAY
 OF Dec. 1992
Glenda Conner
 Glenda Conner



TRANSDUCER OUTPUT,
MILLIVOLTS

WITH NW-1C-60
S/N: 78802

Watts/cm² Incident o

8.60mv at 17 Watts/cm²

MEDTHERM CORPORATION

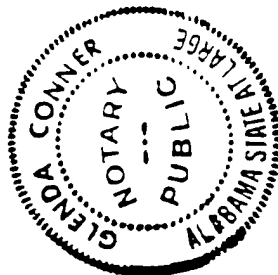
HEAT FLUX

POST OFFICE BOX 412 / HUNTSVILLE, ALABAMA 35804 / TELEPHONE (205) 837-2000

CERTIFICATE OF CALIBRATION

DATE 12/21/92
 CUSTOMER Southwest Res.
 CUSTOMER P.O. 56535
 MODEL NO. 64-5SB-18K
 SERIAL NO. 78801
 ABSORPTIVITY 0.96
 WINDOW TYPE Sapphire
 SENSOR - SCHMIDT-BOELTER
 REFERENCE STANDARD 325732
 TESTED BY FB
 QC ACCEPTANCE TEST
INSPECT
NO. 2

CERTIFIED CALIBRATION
 SUBSCRIBED AND SWORN TO
 BEFORE ME THIS 21st DAY
 OF Dec. 1992
Glenda Conner
 Glenda Conner



TRANSDUCER OUTPUT,
MILLIVOLTS

WITH SW-1C-60
S/N: 78801

Watts/cm² Incident o

9.45mv at 17 Watts/cm²

MEDTHERM CORPORATION

HEAT FLUX

POST OFFICE BOX 412 / HUNTSVILLE, ALABAMA 35804 / TELEPHONE (205) 837-2000

AS RECEIVED CALIBRATION

CALIBRATION PER MEDTHERM PROCEDURE No. PI-20, APPENDIX 1

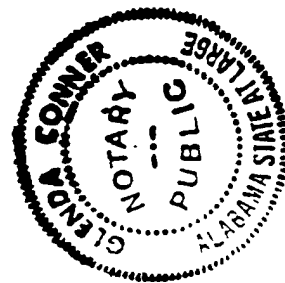
CERTIFICATE OF CALIBRATION

DATE 12/21/92
CUSTOMER Southwest Res.
CUSTOMER P.O. 56536

MODEL NO. 64-1-18K/VRW-30
SERIAL NO. 74049
ABSORPTIVITY 0.97
WINDOW TYPE None
SENSOR - SCHMIDT-BOELTER
REFERENCE STANDARD 238420
TESTED BY FB
QC ACCEPTANCE AC

CERTIFIED CALIBRATION
NO. 2
INSPECT
MEDTHERM

SUBSCRIBED AND SWORN TO
BEFORE ME THIS 21st DAY
OF Dec. 19 92
Glenda Conner
Glenda Conner

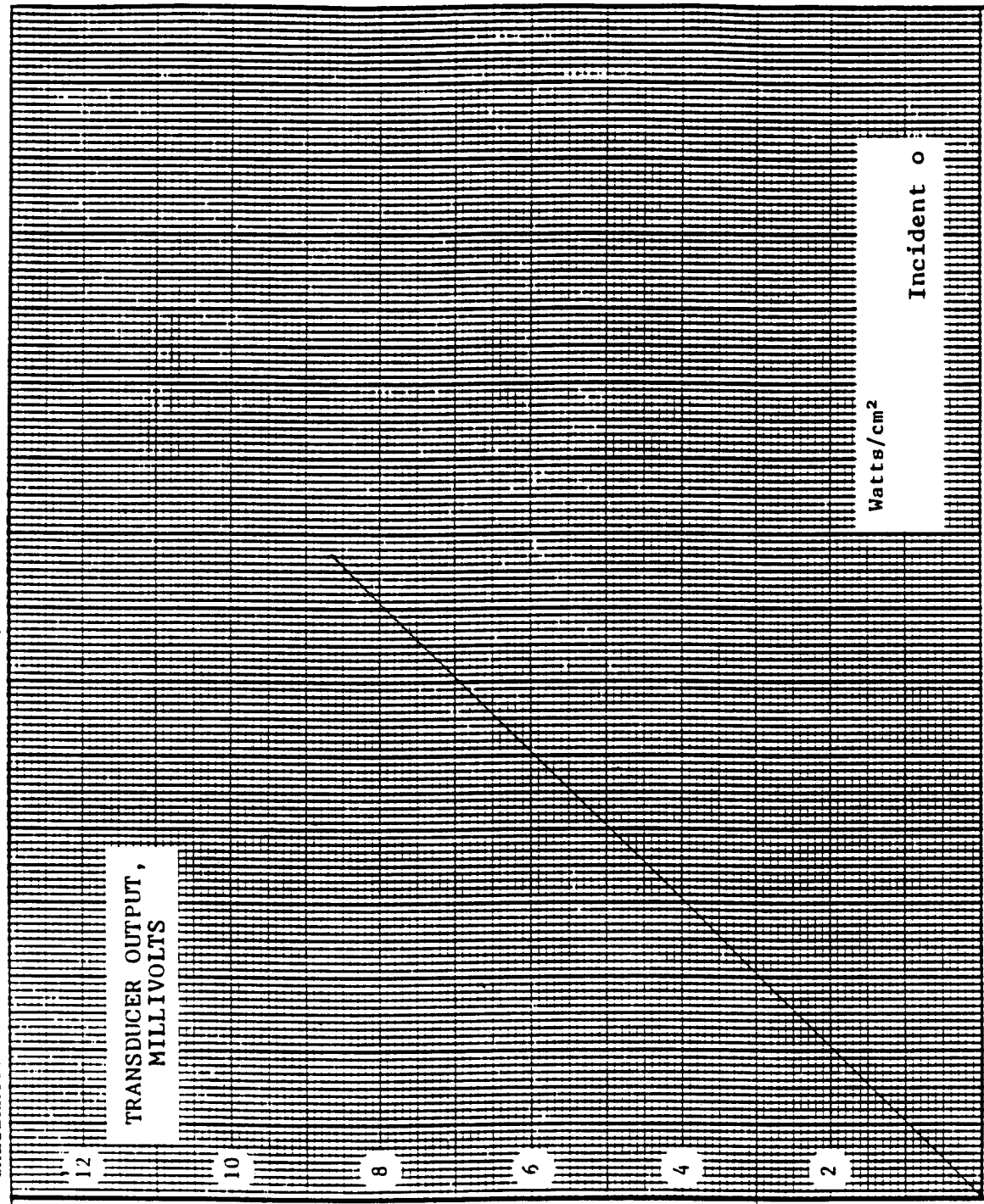


**MEDTHERM
CORPORATION**

8.45mv at 17 Watts/cm²

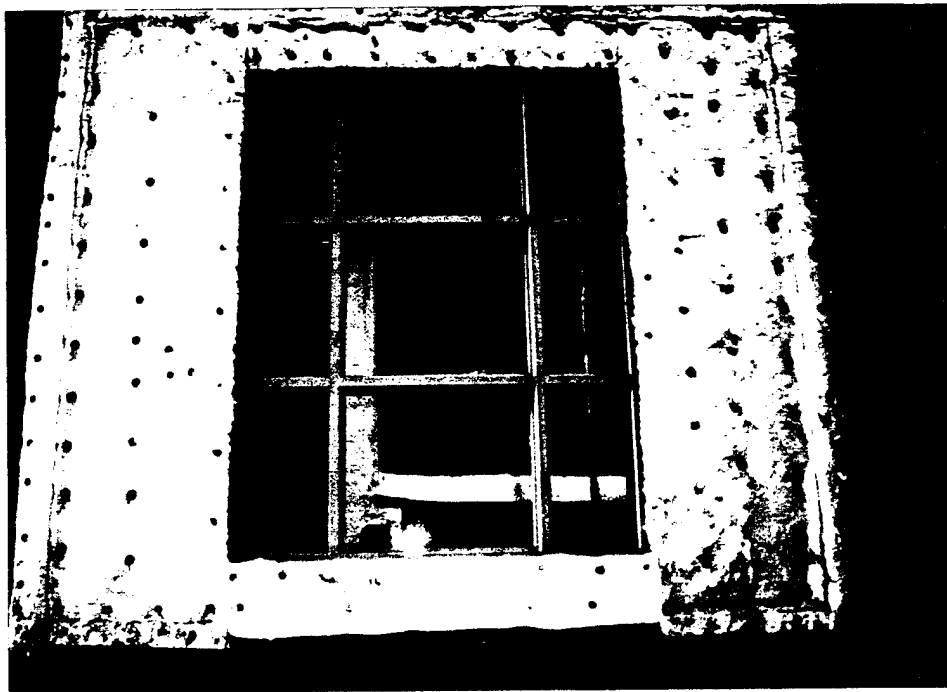
HEAT FLUX

POST OFFICE BOX 412 / HUNTSVILLE, ALABAMA 35894-0412

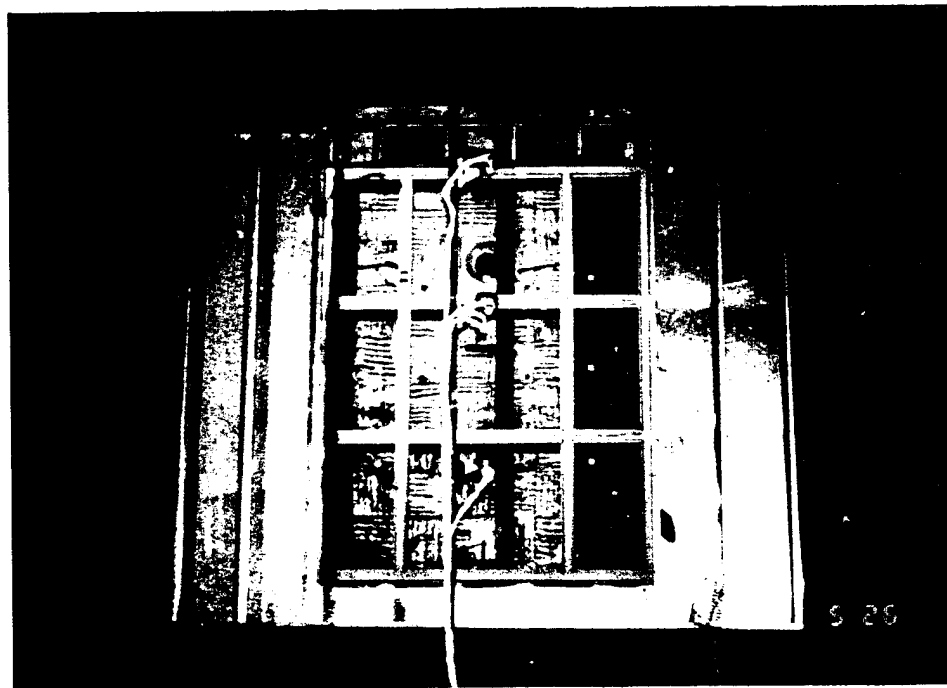


APPENDIX C

PHOTOGRAPHIC DOCUMENTATION



1. Exposed Face of Window Assembly Prior to Fire Exposure Test



2. Unexposed Face of Window Assembly Prior to Fire Exposure Test



3. Unexposed Face of Window Assembly (Test No. 1) Showing Top and Middle Panes Missing



4. Unexposed Face of Window Assembly (Test No. 2) Showing Distorted and Missing Glass



**5. Unexposed Face of Window Assembly (Test No. 3)
Top Pane has Fallen while Right and Middle
Panels have Melted and Fell from Frame**

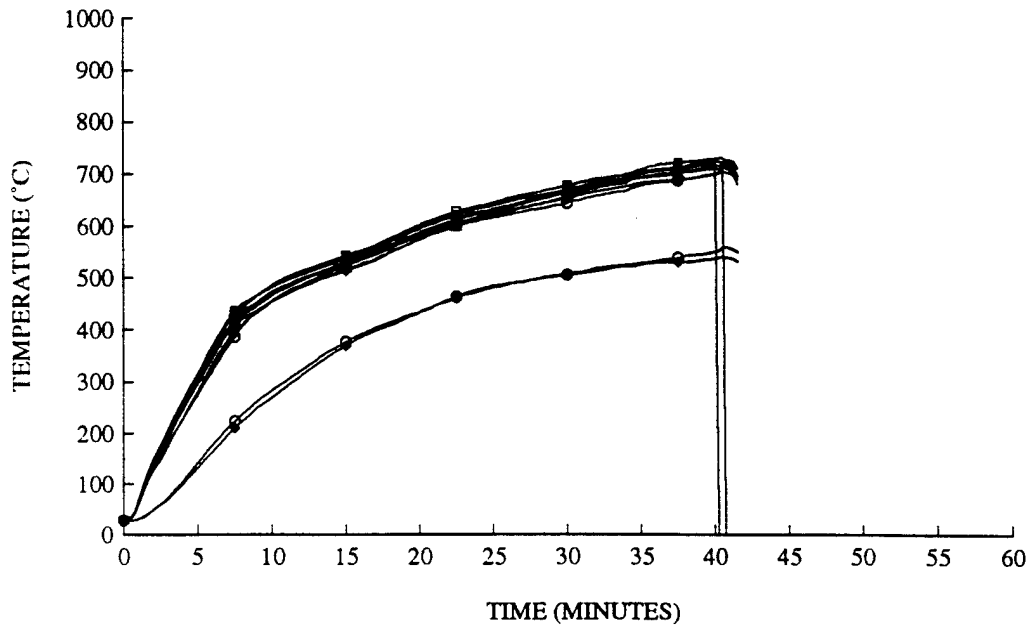
APPENDIX D

TEMPERATURE, HEAT FLUX, AND PRESSURE DATA

CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 146CG-1

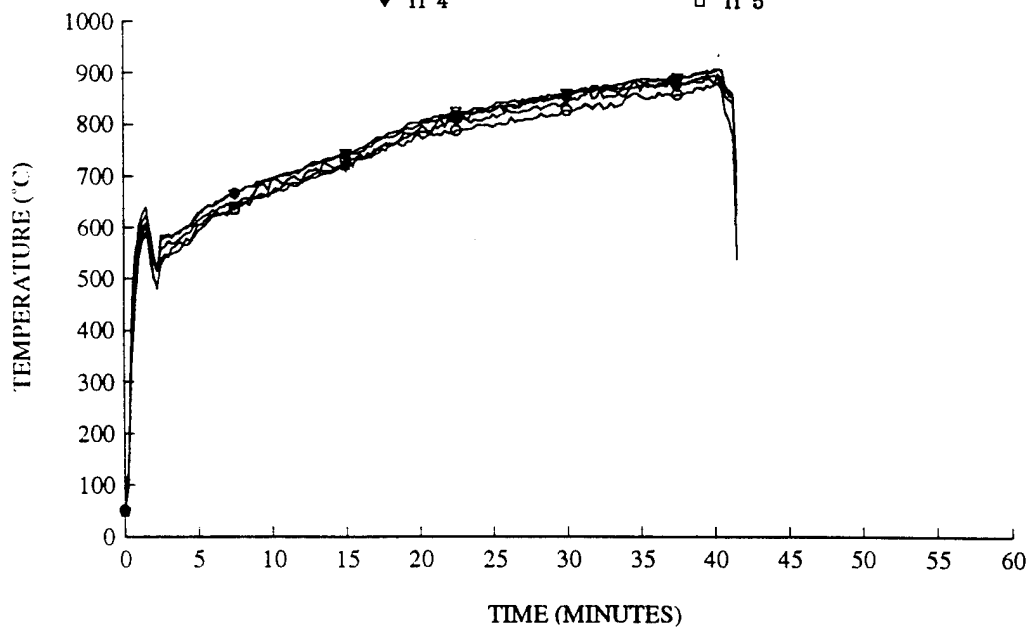
TEST 1 SURFACE TEMPERATURES

○ Ts 1 ● Ts 2 ▼ Ts 3
▼ Ts 4 □ Ts 5 ■ Ts 6
△ Ts 7 ▲ Ts 8 ◇ Ts 9
◆ Ts 10 ○ Ts 11



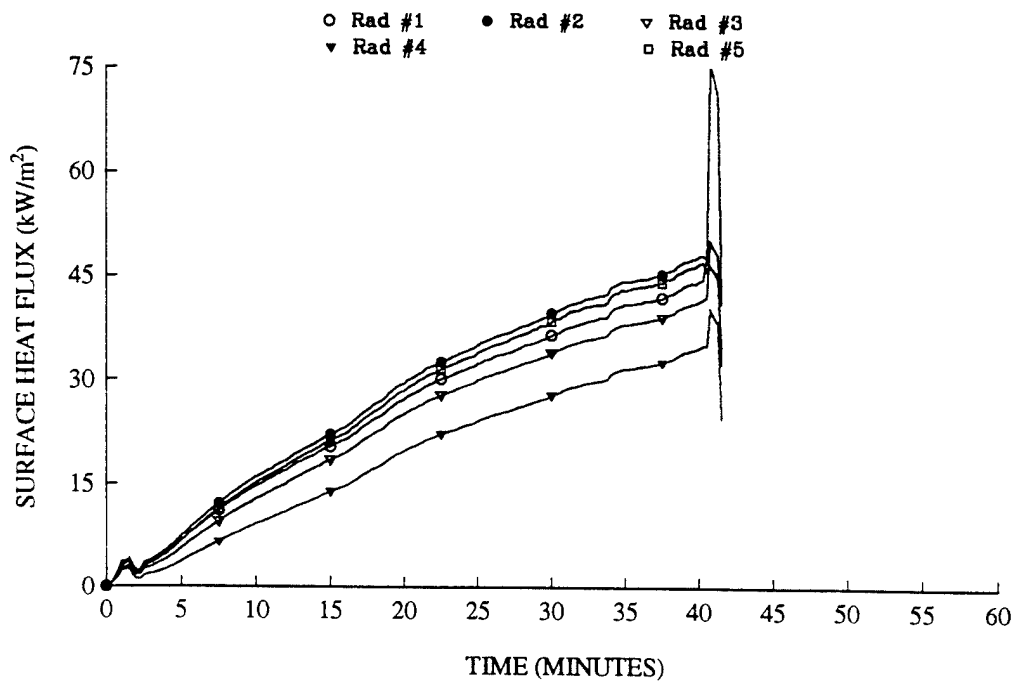
TEST 1 FURNACE TEMPERATURES

○ Tf 1 ● Tf 2 ▼ Tf 3
▼ Tf 4 □ Tf 5

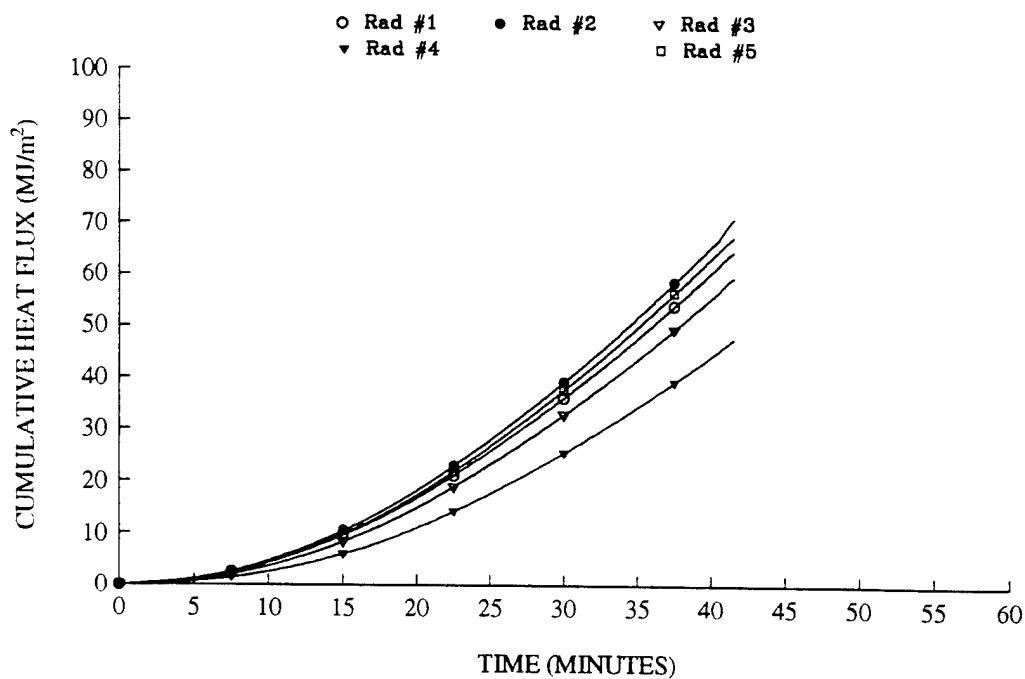


CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 146CG-1

TEST 1 SURFACE HEAT FLUX

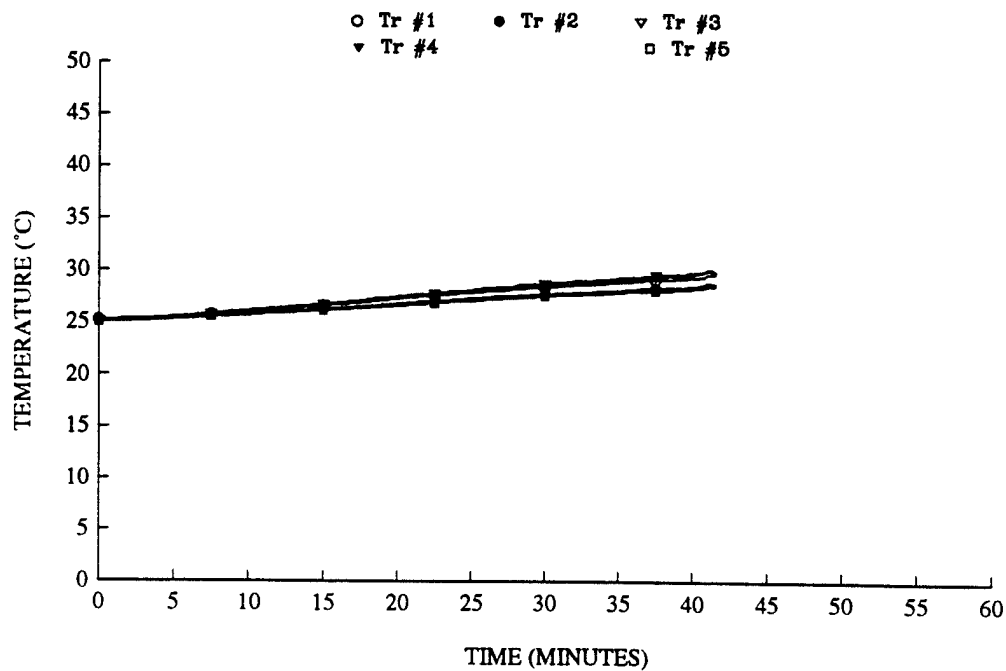


TEST 1 CUMULATIVE SURFACE HEAT FLUX

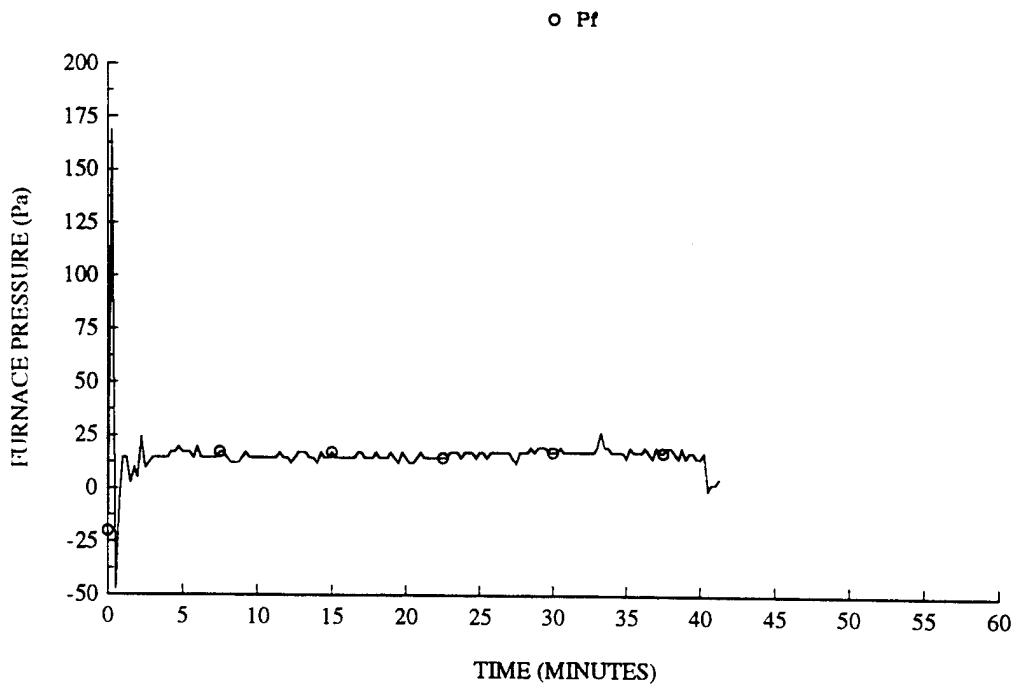


CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 146CG-1

TEST 1 HEAT FLUX BODY TEMPERATURES



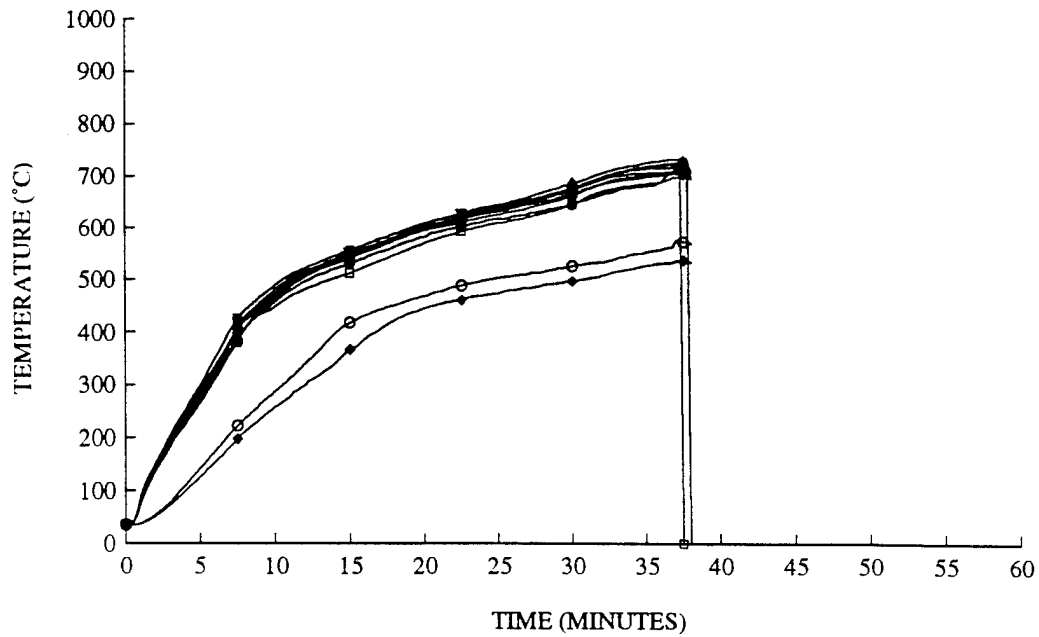
TEST 1 FURNACE PRESSURE



CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 146CG-2

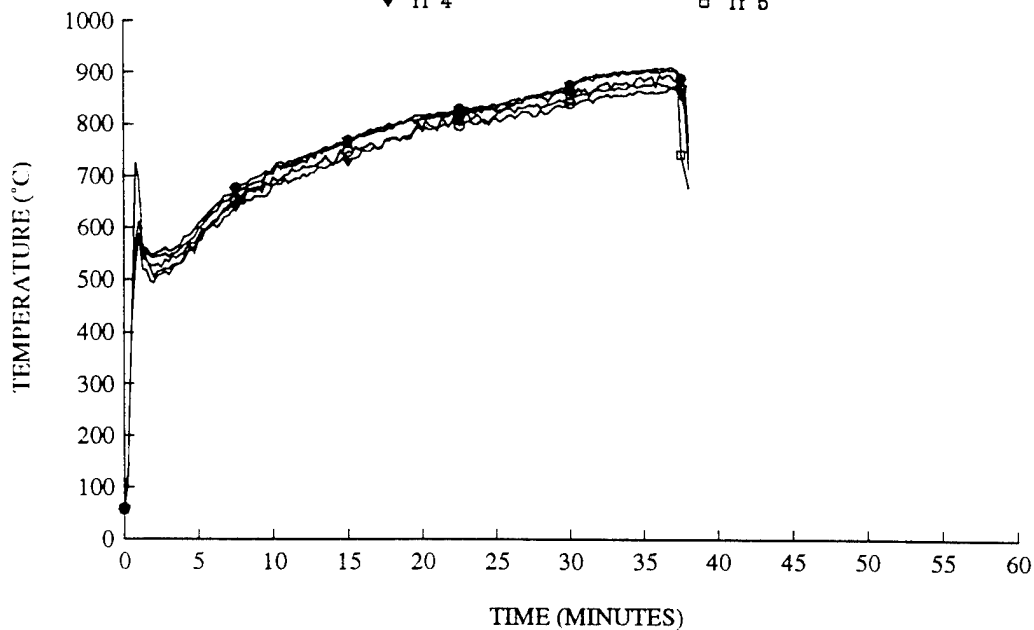
TEST 2 SURFACE TEMPERATURES

○ Ts 1 ● Ts 2 ▼ Ts 3
▼ Ts 4 □ Ts 5 ■ Ts 6
△ Ts 7 ▲ Ts 8 ◇ Ts 9
◆ Ts 10 ○ Ts 11



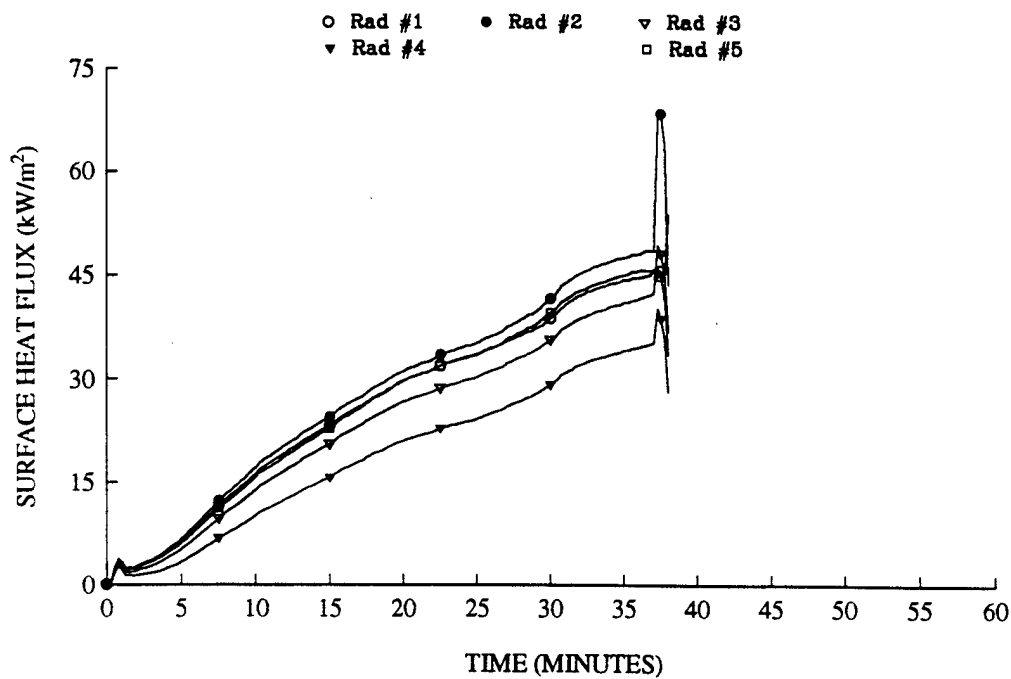
TEST 2 FURNACE TEMPERATURES

○ Tf 1 ● Tf 2 ▼ Tf 3
▼ Tf 4 □ Tf 5

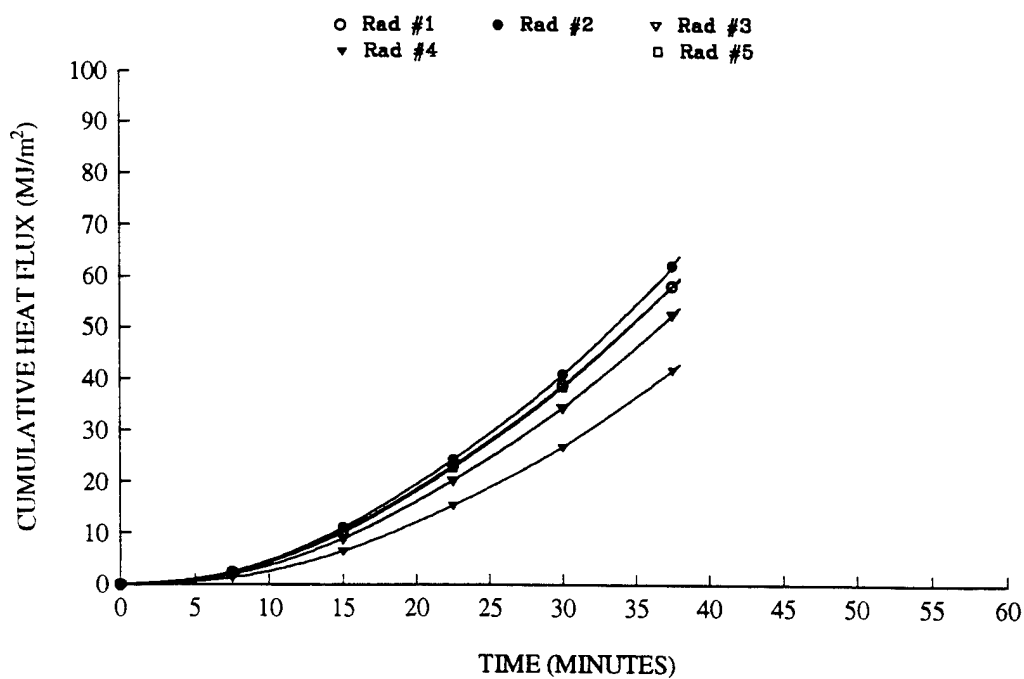


CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 146CG-2

TEST 2 SURFACE HEAT FLUX

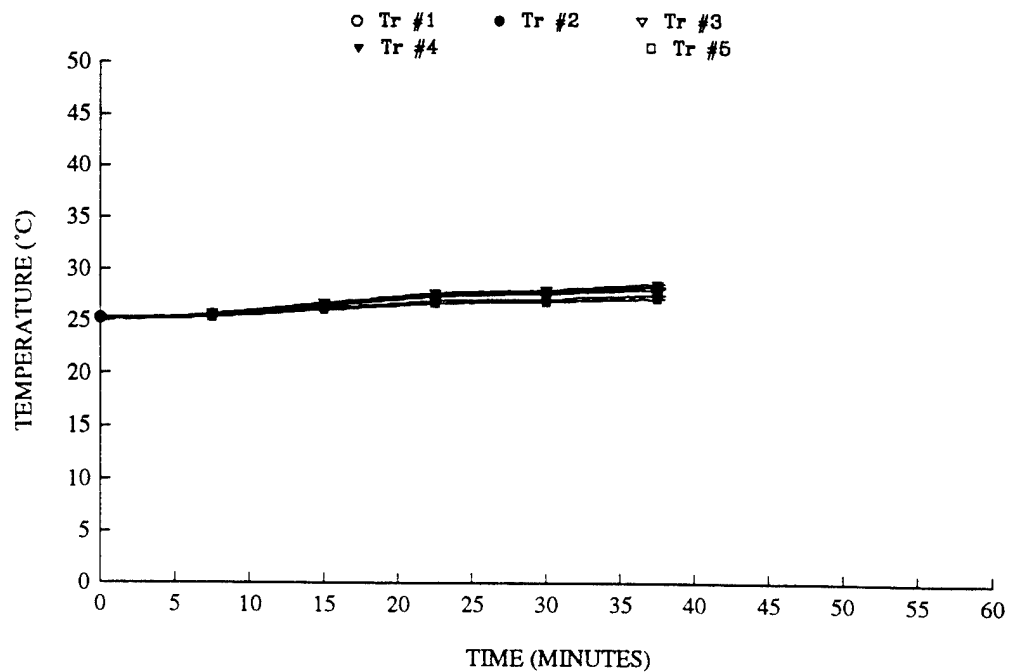


TEST 2 CUMULATIVE SURFACE HEAT FLUX

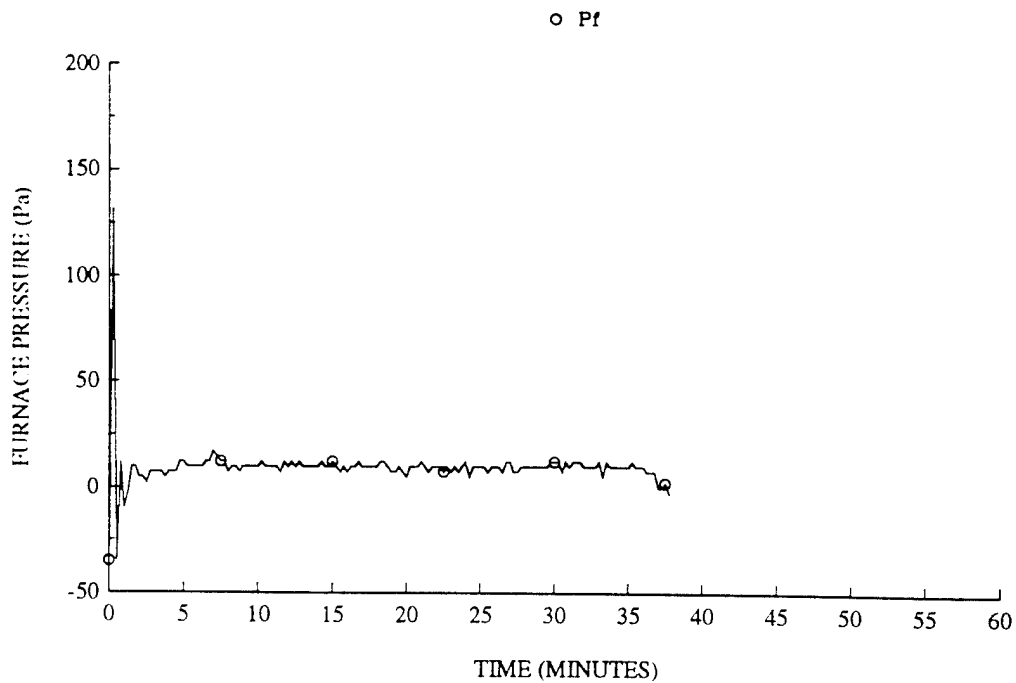


CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 146CG-2

TEST 2 HEAT FLUX BODY TEMPERATURES



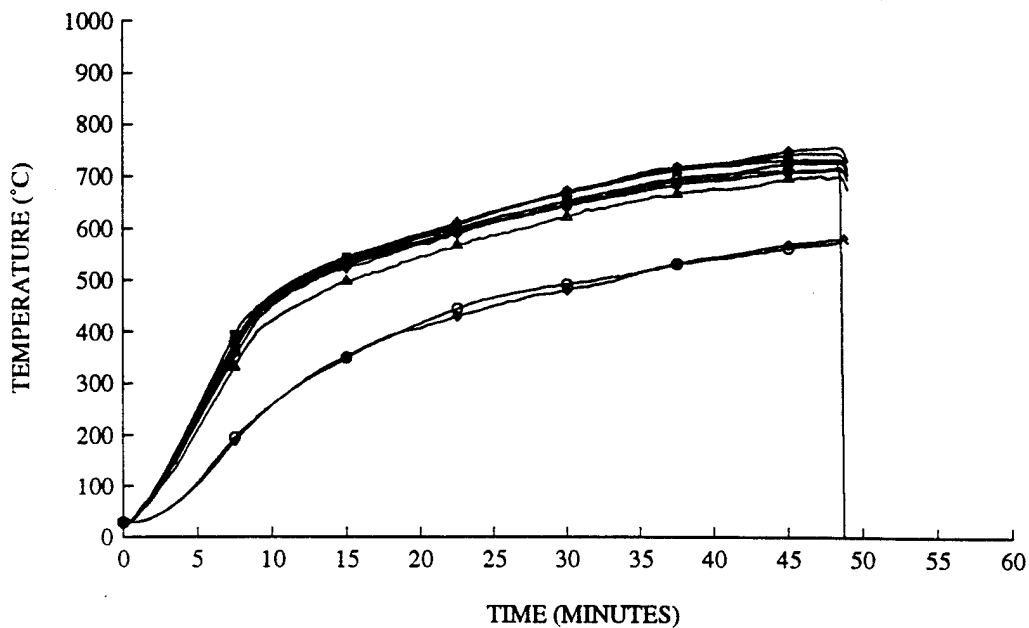
TEST 2 FURNACE PRESSURE



CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 26 May 1993
TEST ID: 147CG-3

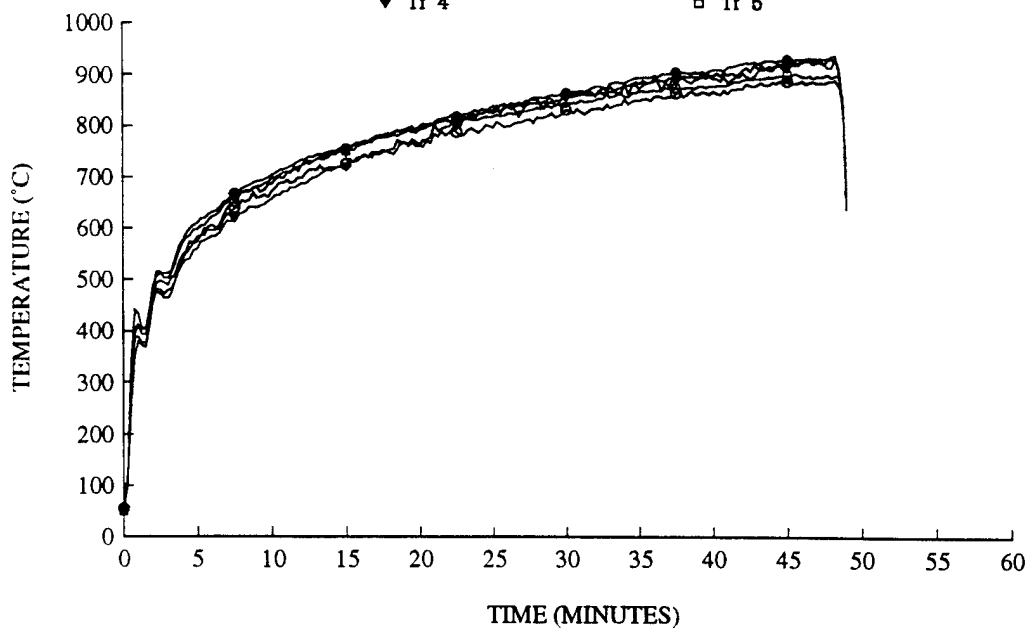
TEST 3 SURFACE TEMPERATURES

○ Ts 1 ● Ts 2 ▼ Ts 3
▼ Ts 4 □ Ts 5 ■ Ts 6
△ Ts 7 ▲ Ts 8 ◇ Ts 9
◆ Ts 10 ○ Ts 11



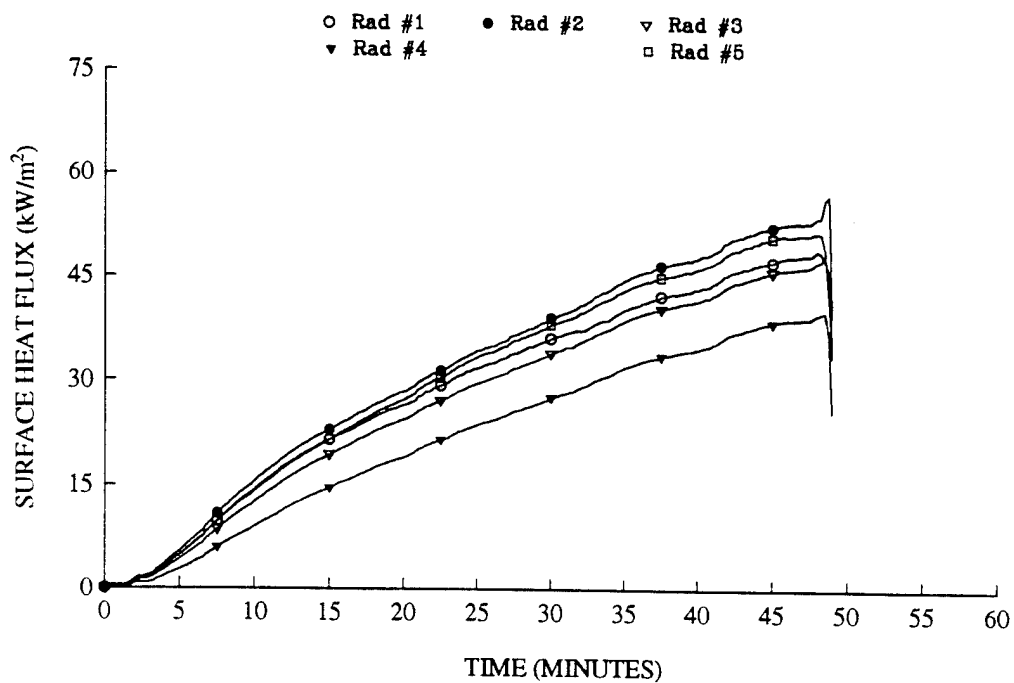
TEST 3 FURNACE TEMPERATURES

○ Tf 1 ● Tf 2 ▼ Tf 3
▼ Tf 4 □ Tf 5

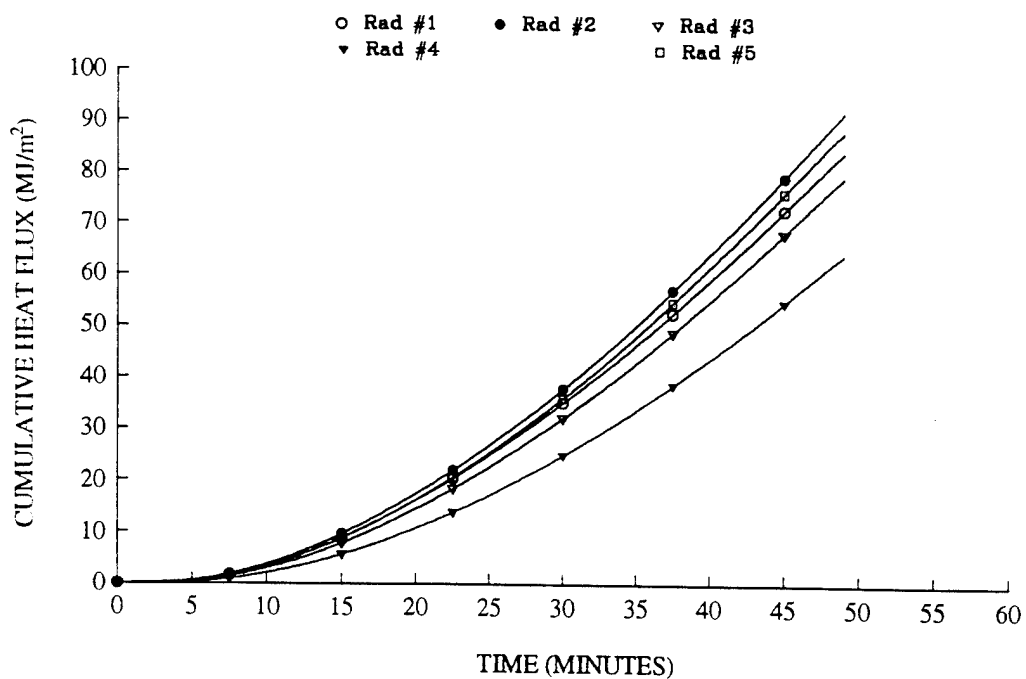


CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 27 May 1993
TEST ID: 147CG-3

TEST 3 SURFACE HEAT FLUX

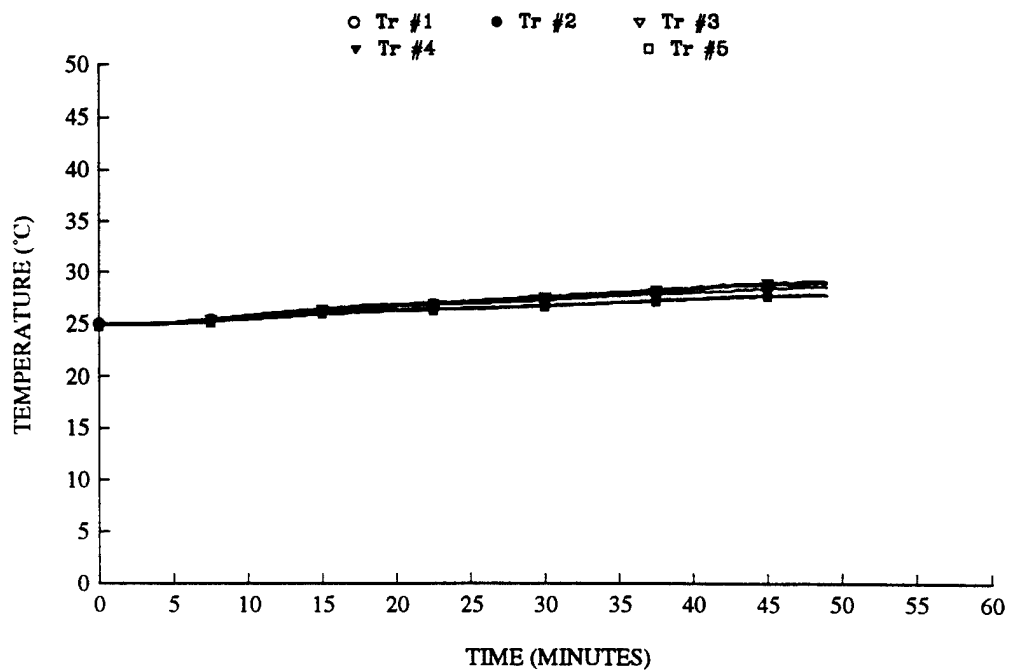


TEST 3 CUMULATIVE SURFACE HEAT FLUX

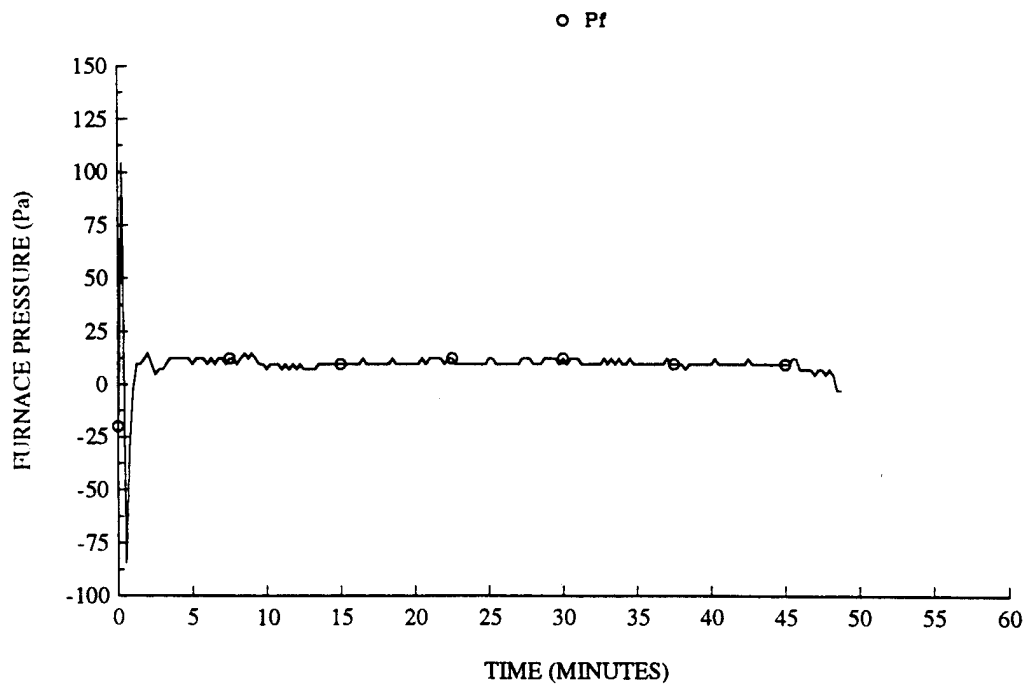


CLIENT: US Coast Guard
PROJECT NO: SwRI 01-5592
DATE: 27 May 1993
TEST ID: 147CG-3

TEST 3 HEAT FLUX BODY TEMPERATURES



TEST 3 FURNACE PRESSURE



TEST NO. 1

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
0: 0	51.3	51.4	49.7	49.1	47.4	49.8	-20.2
0:15	142.9	147.6	129.7	126.6	97.7	128.9	169.1
0:30	403.0	458.8	390.4	420.5	334.9	401.5	-47.6
0:45	502.5	556.9	526.4	521.5	452.9	512.0	-5.3
1: 0	560.9	581.4	602.9	557.7	540.8	568.7	14.6
1:15	599.8	611.7	628.1	584.5	573.0	599.4	14.6
1:30	608.8	624.8	639.8	606.7	590.8	614.2	2.2
1:45	580.7	572.1	593.0	532.9	546.3	565.0	9.7
2: 0	540.0	534.1	549.7	502.1	509.7	527.1	4.7
2:15	520.5	513.9	516.3	484.1	479.1	502.8	24.6
2:30	557.7	583.9	575.9	526.4	538.0	556.4	9.7
2:45	562.8	584.3	581.5	541.7	547.8	563.6	12.2
3: 0	573.4	586.0	584.0	542.6	545.8	566.4	14.6
3:15	569.0	583.3	579.9	559.9	548.9	568.2	14.6
3:30	570.1	587.3	588.9	564.0	551.6	572.4	14.6
3:45	577.0	589.4	592.5	572.9	555.3	577.4	14.6
4: 0	583.6	597.9	597.9	566.2	565.2	582.2	14.6
4:15	589.2	602.9	598.0	579.0	565.2	586.9	17.1
4:30	590.8	602.6	606.0	573.4	570.1	588.6	17.1
4:45	603.7	613.7	618.4	589.2	581.1	601.2	19.6
5: 0	613.7	623.4	628.5	604.8	592.2	612.5	17.1
5:15	619.3	633.5	629.9	606.8	598.7	617.7	17.1
5:30	624.3	637.5	638.8	613.6	604.2	623.7	17.1
5:45	626.9	643.9	642.2	619.9	612.9	629.1	14.6
6: 0	634.3	641.3	642.9	623.7	621.0	632.6	19.6
6:15	633.2	651.1	646.0	629.5	624.1	636.8	14.6
6:30	640.4	650.9	652.9	625.2	623.2	638.5	14.6

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
6:45	639.6	654.0	656.0	628.8	628.0	641.3	14.6
7: 0	646.2	662.8	660.1	623.8	628.8	644.3	14.6
7:15	643.1	663.4	665.9	634.7	633.7	648.2	14.6
7:30	635.8	666.6	665.1	643.9	635.8	649.4	17.1
7:45	648.0	668.0	672.0	648.5	643.9	656.1	17.1
8: 0	654.3	671.9	671.3	643.0	648.7	657.8	14.6
8:15	657.5	678.6	678.5	649.4	647.4	662.3	12.2
8:30	655.9	679.6	679.6	644.1	654.3	662.7	12.2
8:45	663.9	679.0	681.7	656.6	656.3	667.5	12.2
9: 0	675.8	686.0	688.7	660.5	658.0	673.8	14.6
9:15	686.0	682.8	689.0	657.4	665.0	676.1	17.1
9:30	683.2	689.6	692.5	659.5	663.5	677.7	14.6
9:45	672.7	690.5	693.4	666.2	660.5	676.6	14.6
10: 0	693.6	691.8	695.8	666.1	667.1	682.9	14.6
10:15	695.0	695.5	698.6	669.0	676.7	686.9	14.6
10:30	689.6	699.7	701.4	673.6	673.5	687.6	14.6
10:45	682.0	700.6	703.2	670.6	681.6	687.6	14.6
11: 0	692.2	701.4	705.8	675.6	685.9	692.2	14.6
11:15	696.1	702.6	705.6	683.7	685.4	694.7	14.6
11:30	700.3	708.4	708.9	679.6	686.7	696.8	17.1
11:45	694.0	704.9	711.1	680.8	686.6	695.5	14.6
12: 0	691.1	712.1	711.0	689.9	686.5	698.1	14.6
12:15	703.7	715.0	716.7	690.7	693.1	703.9	12.2
12:30	711.3	720.7	721.5	693.8	698.0	709.1	14.6
12:45	709.3	720.3	727.5	702.3	696.2	711.1	17.1
13: 0	714.5	723.4	727.2	705.9	697.4	713.7	17.1
13:15	707.9	725.8	726.3	708.7	700.8	713.9	17.1

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
13:30	726.9	726.9	730.9	709.2	703.9	719.5	14.6
13:45	721.8	729.6	733.3	708.6	704.3	719.5	14.6
14: 0	718.2	730.4	732.9	710.1	704.5	719.2	12.2
14:15	713.9	734.9	736.1	712.4	709.5	721.4	17.1
14:30	718.0	736.8	738.9	718.7	713.3	725.1	14.6
14:45	715.6	741.0	741.5	720.3	718.8	727.4	14.6
15: 0	731.5	740.5	743.6	717.1	719.9	730.5	17.1
15:15	728.9	740.4	746.3	730.2	719.8	733.1	14.6
15:30	717.7	742.9	745.3	732.4	725.4	732.7	14.6
15:45	735.7	742.3	750.2	731.2	729.7	737.8	14.6
16: 0	736.6	745.4	753.6	730.7	741.5	741.6	14.6
16:15	732.6	748.9	754.5	733.9	733.3	740.7	14.6
16:30	744.0	756.0	760.2	737.3	734.2	746.4	14.6
16:45	735.7	756.4	764.6	742.2	736.1	747.0	17.1
17: 0	740.3	764.3	770.2	751.5	745.4	754.4	17.1
17:15	743.0	767.3	774.7	750.0	753.7	757.7	14.6
17:30	751.3	771.6	772.6	757.3	756.8	761.9	14.6
17:45	748.0	774.7	777.8	761.0	762.0	764.7	14.6
18: 0	761.8	773.2	782.2	761.3	756.3	767.0	17.1
18:15	758.5	774.2	783.9	759.6	760.9	767.4	14.6
18:30	762.9	778.0	785.5	764.4	761.7	770.5	14.6
18:45	758.7	784.5	787.4	767.8	771.2	773.9	14.6
19: 0	757.5	787.9	792.7	772.5	782.7	778.7	17.1
19:15	766.3	792.0	799.0	773.6	780.9	782.4	14.6
19:30	764.8	790.1	801.8	779.4	780.3	783.3	12.2
19:45	776.8	792.9	802.1	781.6	783.2	787.3	17.1
20: 0	778.4	797.9	802.5	782.8	789.1	790.1	14.6

COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
20:15	770.9	802.2	806.6	784.0	795.6	791.8	12.2
20:30	774.5	801.7	808.7	782.9	788.1	791.2	12.2
20:45	781.4	805.0	808.2	781.6	782.3	791.7	14.6
21: 0	777.6	804.5	813.0	794.0	790.2	795.9	17.1
21:15	779.4	807.4	813.8	791.1	805.8	799.5	14.6
21:30	777.4	810.1	816.7	796.7	807.8	801.8	14.6
21:45	785.1	810.9	815.5	795.6	795.1	800.4	14.6
22: 0	782.6	814.0	818.2	804.2	809.5	805.7	14.6
22:15	780.6	815.0	821.4	804.0	804.2	805.0	14.6
22:30	787.1	813.4	824.7	804.7	816.3	809.2	14.6
22:45	787.0	818.3	819.5	802.5	815.6	808.6	14.6
23: 0	788.3	817.1	823.0	810.9	814.0	810.7	17.1
23:15	789.9	819.8	822.3	806.9	806.7	809.2	17.1
23:30	789.7	821.3	826.0	802.2	817.9	811.4	17.1
23:45	792.8	820.0	828.9	807.8	819.4	813.8	14.6
24: 0	797.7	824.3	829.7	805.6	823.5	816.2	17.1
24:15	796.4	822.2	829.5	806.2	822.8	815.4	17.1
24:30	798.6	825.5	826.5	811.0	827.2	817.8	17.1
24:45	797.2	821.8	831.4	810.1	822.5	816.6	14.6
25: 0	793.4	826.2	832.9	818.4	825.2	819.2	17.1
25:15	799.0	831.9	840.4	812.5	829.0	822.6	17.1
25:30	800.8	835.7	840.6	816.7	836.1	826.0	14.6
25:45	798.9	833.5	841.0	819.1	823.8	823.3	17.1
26: 0	799.8	836.0	841.3	827.1	835.0	827.8	17.1
26:15	812.5	835.8	843.7	822.1	835.8	830.0	17.1
26:30	803.3	835.6	846.0	821.6	830.1	827.3	17.1
26:45	806.9	831.2	841.1	820.1	834.7	826.8	17.1

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
27: 0	805.9	836.7	847.3	824.6	844.7	831.8	17.1
27:15	809.5	837.7	844.8	825.0	839.0	831.2	14.6
27:30	807.7	841.7	847.8	825.2	847.4	834.0	12.2
27:45	809.5	844.9	848.9	831.6	839.5	834.9	17.1
28: 0	812.4	844.2	849.5	833.3	841.6	836.2	17.1
28:15	819.7	845.4	851.7	827.0	852.9	839.3	17.1
28:30	814.5	843.4	848.0	832.1	850.2	837.6	19.6
28:45	813.7	847.9	855.1	834.1	845.7	839.3	17.1
29: 0	816.3	847.2	854.5	838.1	849.4	841.1	19.6
29:15	815.3	851.5	856.2	838.5	854.1	843.1	19.6
29:30	816.3	849.0	856.3	833.4	855.7	842.2	19.6
29:45	824.4	854.1	858.3	837.9	858.1	846.6	17.1
30: 0	826.1	856.4	860.3	845.2	854.4	848.5	17.1
30:15	822.6	857.6	861.7	845.6	857.0	848.9	17.1
30:30	825.6	859.2	861.4	849.7	857.6	850.7	19.6
30:45	829.0	861.8	864.8	845.1	862.7	852.7	17.1
31: 0	830.7	863.5	865.4	854.2	868.4	856.4	17.1
31:15	838.5	861.1	869.1	855.6	865.1	857.9	17.1
31:30	834.8	866.8	865.8	865.1	866.2	859.7	17.1
31:45	827.7	862.3	874.1	849.7	871.8	857.1	17.1
32: 0	836.4	867.0	868.4	850.2	873.8	859.2	17.1
32:15	839.4	867.3	867.0	864.5	868.7	861.4	17.1
32:30	828.5	868.1	874.4	849.8	863.3	856.8	17.1
32:45	831.4	868.6	874.7	853.1	869.6	859.5	17.1
33: 0	840.2	869.5	873.5	853.3	864.1	860.1	19.6
33:15	831.5	870.3	874.2	851.7	864.4	858.4	27.1
33:30	833.9	868.1	876.9	857.7	859.1	859.1	19.6

COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
33:45	838.4	869.4	876.9	853.3	866.8	861.0	19.6
34: 0	848.9	876.8	879.6	856.1	866.8	865.6	17.1
34:15	852.5	881.9	881.7	865.7	870.5	870.4	17.1
34:30	857.6	881.7	883.8	881.4	869.7	874.8	17.1
34:45	857.5	887.1	885.6	878.4	871.8	876.1	17.1
35: 0	853.0	882.0	886.3	863.5	872.7	871.5	14.6
35:15	849.3	877.6	887.3	877.1	875.3	873.3	19.6
35:30	848.7	883.5	886.7	876.6	872.0	873.5	17.1
35:45	851.4	882.6	886.0	874.6	874.3	873.8	17.1
36: 0	851.2	883.2	885.1	870.6	873.5	872.7	17.1
36:15	860.8	885.2	886.5	878.5	873.1	876.8	19.6
36:30	854.4	886.2	883.6	878.0	875.1	875.4	17.1
36:45	857.6	885.2	883.3	879.7	872.9	875.8	14.6
37: 0	856.8	885.5	893.4	881.0	882.6	879.9	19.6
37:15	853.4	885.4	889.9	865.1	878.3	874.4	17.1
37:30	856.4	887.6	891.0	872.0	879.5	877.3	17.1
37:45	855.4	889.1	893.8	877.2	878.6	878.8	19.6
38: 0	859.8	892.0	891.2	876.9	878.1	879.6	19.6
38:15	862.4	890.3	890.8	881.2	877.7	880.5	17.1
38:30	860.9	894.5	895.2	881.7	884.6	883.4	14.6
38:45	869.4	899.1	897.3	881.2	886.5	886.7	19.6
39: 0	871.1	898.5	898.8	880.8	888.2	887.5	14.6
39:15	867.0	901.5	898.5	881.2	892.1	888.0	17.1
39:30	874.1	901.5	904.3	896.3	887.3	892.7	17.1
39:45	871.3	899.0	901.0	886.9	892.8	890.2	14.6
40: 0	875.9	901.9	907.1	878.6	894.8	891.7	14.6
40:15	879.1	906.2	907.0	897.2	892.3	896.3	17.1

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
40:30	867.0	903.3	905.7	885.7	863.0	884.9	-0.3
40:45	871.0	868.4	875.5	853.4	822.9	858.2	2.2
41: 0	854.2	865.1	864.0	847.6	807.1	847.6	2.2
41:15	851.9	858.0	856.1	839.7	775.5	836.2	4.7

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
0: 0	0.0	0.0	0.0	0.0	0.0
0:15	0.3	0.3	0.3	0.2	0.3
0:30	1.3	1.3	1.0	0.9	1.0
0:45	2.1	2.3	1.7	1.6	1.9
1: 0	3.1	3.6	2.6	2.4	3.1
1:15	3.4	3.7	2.8	2.5	3.5
1:30	3.8	4.1	3.1	2.6	3.7
1:45	2.8	2.9	2.2	1.6	2.5
2: 0	2.3	2.4	1.8	1.1	2.0
2:15	2.4	2.5	1.9	1.1	2.2
2:30	3.2	3.5	2.6	1.7	3.1
2:45	3.5	3.8	2.8	1.9	3.4
3: 0	3.8	4.0	3.0	2.0	3.6
3:15	4.0	4.3	3.3	2.1	3.9
3:30	4.4	4.7	3.5	2.3	4.2
3:45	4.7	5.1	3.9	2.5	4.6
4: 0	5.1	5.5	4.2	2.6	4.9
4:15	5.5	5.9	4.5	2.9	5.4
4:30	5.9	6.3	4.8	3.1	5.7
4:45	6.3	6.9	5.3	3.5	6.3
5: 0	6.8	7.5	5.7	3.8	6.8
5:15	7.3	8.0	6.1	4.1	7.3
5:30	7.8	8.5	6.5	4.4	7.8
5:45	8.3	9.0	6.9	4.7	8.2
6: 0	8.7	9.4	7.3	5.0	8.8
6:15	9.1	9.9	7.7	5.3	9.2
6:30	9.6	10.4	8.1	5.5	9.6

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
6:45	10.0	10.9	8.5	5.8	10.1
7: 0	10.3	11.3	8.9	6.1	10.5
7:15	10.8	11.8	9.2	6.4	11.0
7:30	11.2	12.2	9.6	6.6	11.4
7:45	11.6	12.6	9.9	6.9	11.8
8: 0	11.9	13.0	10.3	7.2	12.2
8:15	12.4	13.5	10.7	7.5	12.7
8:30	12.8	13.9	11.0	7.8	13.1
8:45	13.0	14.2	11.3	8.0	13.4
9: 0	13.5	14.6	11.7	8.3	13.8
9:15	13.7	15.0	12.0	8.5	14.1
9:30	14.1	15.3	12.3	8.8	14.5
9:45	14.4	15.7	12.6	9.0	14.9
10: 0	14.7	16.0	12.9	9.2	15.2
10:15	15.0	16.3	13.2	9.4	15.5
10:30	15.3	16.6	13.4	9.7	15.8
10:45	15.6	16.9	13.7	9.9	16.1
11: 0	15.8	17.2	14.0	10.1	16.4
11:15	16.2	17.6	14.3	10.4	16.7
11:30	16.5	17.9	14.6	10.6	17.0
11:45	16.8	18.2	14.8	10.8	17.3
12: 0	16.9	18.4	15.1	11.0	17.6
12:15	17.3	18.8	15.4	11.3	17.9
12:30	17.7	19.2	15.8	11.6	18.3
12:45	18.0	19.5	16.1	11.9	18.6
13: 0	18.3	19.8	16.3	12.1	18.9
13:15	18.5	20.0	16.6	12.3	19.2

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
13:30	18.8	20.4	16.9	12.5	19.5
13:45	19.0	20.6	17.1	12.7	19.7
14: 0	19.3	20.9	17.4	12.9	20.0
14:15	19.6	21.2	17.6	13.2	20.3
14:30	19.9	21.6	18.0	13.5	20.7
14:45	20.2	21.9	18.3	13.7	21.0
15: 0	20.4	22.1	18.5	13.9	21.2
15:15	20.7	22.4	18.7	14.1	21.6
15:30	20.9	22.7	19.0	14.3	21.7
15:45	21.1	23.0	19.2	14.5	22.0
16: 0	21.4	23.1	19.4	14.7	22.2
16:15	21.6	23.5	19.7	14.9	22.6
16:30	22.1	24.0	20.2	15.3	23.1
16:45	22.4	24.4	20.5	15.6	23.4
17: 0	22.9	24.8	20.9	16.0	23.9
17:15	23.3	25.3	21.3	16.4	24.4
17:30	23.6	25.7	21.6	16.7	24.7
17:45	24.1	26.1	22.0	17.0	25.1
18: 0	24.3	26.5	22.3	17.3	25.4
18:15	24.6	26.8	22.6	17.5	25.8
18:30	24.9	27.0	22.9	17.8	26.1
18:45	25.4	27.5	23.3	18.2	26.6
19: 0	25.9	28.1	23.8	18.6	27.0
19:15	26.2	28.5	24.1	18.9	27.5
19:30	26.6	29.0	24.5	19.3	27.9
19:45	26.9	29.3	24.8	19.5	28.3
20: 0	27.2	29.5	25.1	19.8	28.5

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
20:15	27.6	29.9	25.4	20.0	28.8
20:30	27.9	30.3	25.7	20.3	29.2
20:45	28.2	30.5	26.0	20.5	29.4
21: 0	28.4	30.8	26.3	20.8	29.9
21:15	28.8	31.1	26.5	21.1	30.1
21:30	29.1	31.6	26.9	21.4	30.5
21:45	29.4	31.8	27.1	21.6	30.8
22: 0	29.6	32.0	27.3	21.8	30.9
22:15	29.9	32.3	27.6	22.0	31.2
22:30	30.1	32.6	27.8	22.2	31.5
22:45	30.4	32.8	28.0	22.4	31.7
23: 0	30.4	33.0	28.2	22.5	31.9
23:15	30.7	33.3	28.4	22.7	32.2
23:30	31.0	33.5	28.6	22.9	32.4
23:45	31.2	33.8	28.9	23.1	32.7
24: 0	31.4	34.0	29.0	23.3	32.9
24:15	31.6	34.2	29.2	23.5	33.1
24:30	31.8	34.4	29.4	23.6	33.3
24:45	31.9	34.6	29.5	23.8	33.4
25: 0	32.2	35.0	29.9	24.1	33.9
25:15	32.5	35.4	30.1	24.3	34.2
25:30	32.8	35.6	30.4	24.5	34.4
25:45	33.0	35.9	30.6	24.7	34.6
26: 0	33.2	36.0	30.7	24.9	34.9
26:15	33.5	36.3	31.0	25.1	35.1
26:30	33.6	36.5	31.1	25.2	35.2
26:45	33.7	36.6	31.3	25.4	35.4

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
27: 0	33.9	36.8	31.4	25.5	35.6
27:15	34.0	36.9	31.6	25.6	35.9
27:30	34.3	37.3	31.8	25.9	36.2
27:45	34.5	37.5	32.0	26.1	36.4
28: 0	34.8	37.8	32.3	26.3	36.6
28:15	35.1	37.9	32.4	26.4	36.7
28:30	35.1	38.0	32.6	26.5	37.0
28:45	35.3	38.4	32.8	26.8	37.3
29: 0	35.5	38.5	33.0	26.9	37.4
29:15	35.8	38.9	33.2	27.2	37.9
29:30	35.9	39.0	33.3	27.3	37.8
29:45	36.1	39.2	33.5	27.4	38.0
30: 0	36.5	39.7	33.9	27.8	38.5
30:15	36.8	39.9	34.1	28.0	38.8
30:30	36.8	40.1	34.3	28.2	38.9
30:45	37.2	40.4	34.6	28.5	39.2
31: 0	37.5	40.7	34.9	28.7	39.5
31:15	37.7	41.0	35.1	28.9	39.9
31:30	37.8	41.1	35.3	29.0	40.0
31:45	38.0	41.3	35.4	29.2	40.0
32: 0	38.2	41.4	35.5	29.3	40.3
32:15	38.4	41.7	35.7	29.5	40.6
32:30	38.5	41.8	35.8	29.6	40.7
32:45	38.7	41.9	36.0	29.7	40.8
33: 0	38.8	42.1	36.1	29.8	40.9
33:15	39.0	42.2	36.2	29.9	40.9
33:30	39.0	42.3	36.3	29.9	40.9

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
33:45	39.1	42.5	36.5	30.1	41.3
34: 0	39.9	43.4	37.1	30.8	42.1
34:15	40.4	43.7	37.5	31.1	42.6
34:30	40.6	44.0	37.8	31.4	42.7
34:45	40.8	44.3	38.0	31.6	43.1
35: 0	41.0	44.2	38.0	31.6	43.0
35:15	41.0	44.2	38.1	31.6	43.1
35:30	41.0	44.3	38.2	31.7	43.3
35:45	41.2	44.5	38.3	31.8	43.4
36: 0	41.2	44.6	38.4	31.9	43.5
36:15	41.4	44.6	38.5	32.0	43.5
36:30	41.4	44.8	38.5	32.0	43.7
36:45	41.6	44.9	38.7	32.2	43.7
37: 0	41.7	45.1	38.8	32.3	43.9
37:15	41.8	45.1	38.9	32.4	44.0
37:30	41.9	45.3	39.1	32.5	44.1
37:45	42.2	45.6	39.3	32.8	44.6
38: 0	42.5	45.9	39.6	33.0	44.7
38:15	42.6	46.0	39.7	33.1	44.9
38:30	43.0	46.6	40.2	33.5	45.5
38:45	43.2	46.8	40.4	33.8	45.5
39: 0	43.7	47.1	40.7	34.1	46.0
39:15	43.8	47.3	40.9	34.2	46.2
39:30	44.0	47.5	41.0	34.4	46.4
39:45	44.0	47.5	41.2	34.5	46.4
40: 0	44.4	47.9	41.5	34.8	46.9
40:15	44.6	48.1	41.8	35.0	47.1

COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
40:30	47.8	47.6	42.1	35.0	45.9
40:45	46.5	75.8	50.1	40.4	46.6
41: 0	45.9	73.6	49.0	39.3	45.8
41:15	45.2	71.2	48.1	38.3	44.8

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
0: 0	25.2	25.1	25.1	25.1	25.0
0:15	25.2	25.1	25.1	25.1	25.1
0:30	25.2	25.1	25.1	25.1	25.1
0:45	25.2	25.1	25.2	25.1	25.1
1: 0	25.2	25.2	25.2	25.2	25.1
1:15	25.2	25.2	25.2	25.2	25.1
1:30	25.3	25.2	25.2	25.2	25.1
1:45	25.3	25.2	25.3	25.2	25.1
2: 0	25.3	25.2	25.2	25.2	25.1
2:15	25.3	25.2	25.3	25.2	25.1
2:30	25.3	25.2	25.3	25.2	25.1
2:45	25.3	25.2	25.3	25.3	25.1
3: 0	25.3	25.2	25.3	25.3	25.1
3:15	25.3	25.2	25.3	25.3	25.1
3:30	25.3	25.2	25.3	25.3	25.2
3:45	25.4	25.3	25.4	25.3	25.2
4: 0	25.4	25.3	25.4	25.3	25.2
4:15	25.4	25.3	25.4	25.3	25.2
4:30	25.4	25.3	25.4	25.4	25.2
4:45	25.5	25.3	25.5	25.4	25.2
5: 0	25.4	25.3	25.5	25.4	25.3
5:15	25.5	25.4	25.5	25.5	25.3
5:30	25.5	25.4	25.5	25.5	25.3
5:45	25.5	25.4	25.6	25.5	25.3
6: 0	25.6	25.4	25.6	25.5	25.3
6:15	25.6	25.5	25.6	25.6	25.3
6:30	25.6	25.5	25.7	25.6	25.4

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
6:45	25.6	25.5	25.7	25.6	25.4
7: 0	25.6	25.5	25.7	25.7	25.4
7:15	25.7	25.6	25.8	25.7	25.4
7:30	25.7	25.6	25.8	25.7	25.5
7:45	25.7	25.6	25.8	25.8	25.5
8: 0	25.8	25.6	25.8	25.8	25.5
8:15	25.8	25.7	25.9	25.8	25.5
8:30	25.8	25.6	25.9	25.8	25.5
8:45	25.9	25.7	26.0	25.9	25.6
9: 0	25.9	25.7	26.0	25.9	25.6
9:15	25.9	25.7	26.0	25.9	25.6
9:30	26.0	25.7	26.1	26.0	25.6
9:45	26.0	25.8	26.1	26.0	25.6
10: 0	26.0	25.8	26.1	26.0	25.6
10:15	26.0	25.8	26.2	26.1	25.7
10:30	26.1	25.8	26.2	26.1	25.7
10:45	26.1	25.9	26.2	26.1	25.7
11: 0	26.1	25.9	26.2	26.2	25.8
11:15	26.1	25.9	26.3	26.2	25.8
11:30	26.2	25.9	26.3	26.2	25.8
11:45	26.2	25.9	26.3	26.3	25.8
12: 0	26.2	26.0	26.4	26.3	25.8
12:15	26.3	26.0	26.4	26.3	25.9
12:30	26.3	26.0	26.4	26.4	25.9
12:45	26.3	26.0	26.5	26.4	25.9
13: 0	26.4	26.1	26.5	26.4	25.9
13:15	26.4	26.1	26.6	26.4	26.0

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
13:30	26.4	26.1	26.6	26.5	26.0
13:45	26.5	26.1	26.6	26.5	26.0
14: 0	26.5	26.2	26.6	26.6	26.1
14:15	26.5	26.2	26.7	26.6	26.1
14:30	26.5	26.2	26.7	26.6	26.1
14:45	26.5	26.2	26.7	26.6	26.1
15: 0	26.6	26.2	26.7	26.7	26.1
15:15	26.6	26.3	26.8	26.7	26.1
15:30	26.7	26.3	26.8	26.7	26.2
15:45	26.7	26.3	26.8	26.7	26.2
16: 0	26.7	26.3	26.9	26.8	26.2
16:15	26.7	26.4	26.9	26.8	26.2
16:30	26.7	26.4	26.9	26.8	26.2
16:45	26.8	26.4	27.0	26.9	26.2
17: 0	26.8	26.4	27.0	26.9	26.3
17:15	26.8	26.5	27.0	26.9	26.3
17:30	26.9	26.5	27.1	27.0	26.3
17:45	26.9	26.5	27.1	27.0	26.3
18: 0	26.9	26.5	27.2	27.0	26.4
18:15	27.0	26.6	27.2	27.1	26.4
18:30	27.0	26.6	27.3	27.2	26.4
18:45	27.1	26.6	27.3	27.2	26.4
19: 0	27.1	26.7	27.3	27.2	26.5
19:15	27.1	26.7	27.3	27.2	26.5
19:30	27.2	26.7	27.4	27.3	26.5
19:45	27.2	26.7	27.4	27.3	26.6
20: 0	27.2	26.8	27.5	27.3	26.6

COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
20:15	27.3	26.8	27.5	27.4	26.6
20:30	27.3	26.8	27.5	27.4	26.6
20:45	27.4	26.9	27.6	27.5	26.7
21: 0	27.4	26.9	27.6	27.5	26.7
21:15	27.4	26.9	27.7	27.5	26.7
21:30	27.5	27.0	27.7	27.6	26.7
21:45	27.5	27.0	27.7	27.6	26.7
22: 0	27.5	27.0	27.7	27.6	26.8
22:15	27.5	27.0	27.8	27.6	26.8
22:30	27.5	27.0	27.8	27.7	26.8
22:45	27.6	27.1	27.8	27.7	26.9
23: 0	27.6	27.1	27.9	27.8	26.9
23:15	27.6	27.1	27.9	27.8	26.9
23:30	27.7	27.1	28.0	27.8	27.0
23:45	27.7	27.2	28.0	27.8	27.0
24: 0	27.7	27.2	28.0	27.9	27.0
24:15	27.8	27.2	28.0	27.9	27.0
24:30	27.8	27.2	28.0	27.9	27.0
24:45	27.8	27.3	28.1	28.0	27.1
25: 0	27.8	27.3	28.1	28.0	27.0
25:15	27.9	27.3	28.2	28.0	27.1
25:30	27.9	27.3	28.2	28.0	27.1
25:45	27.9	27.4	28.3	28.1	27.1
26: 0	28.0	27.4	28.3	28.2	27.2
26:15	28.0	27.4	28.3	28.2	27.2
26:30	28.0	27.5	28.3	28.2	27.2
26:45	28.0	27.5	28.4	28.2	27.2

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
27: 0	28.0	27.5	28.4	28.2	27.2
27:15	28.1	27.5	28.4	28.3	27.3
27:30	28.1	27.5	28.4	28.3	27.3
27:45	28.2	27.5	28.4	28.3	27.3
28: 0	28.2	27.5	28.5	28.3	27.3
28:15	28.2	27.6	28.6	28.4	27.4
28:30	28.2	27.6	28.6	28.4	27.4
28:45	28.3	27.6	28.6	28.4	27.4
29: 0	28.3	27.6	28.6	28.4	27.4
29:15	28.3	27.7	28.7	28.5	27.4
29:30	28.3	27.6	28.6	28.5	27.5
29:45	28.3	27.7	28.6	28.5	27.5
30: 0	28.3	27.7	28.7	28.5	27.5
30:15	28.4	27.7	28.7	28.5	27.5
30:30	28.4	27.7	28.8	28.6	27.5
30:45	28.4	27.8	28.8	28.7	27.6
31: 0	28.5	27.8	28.8	28.7	27.6
31:15	28.5	27.8	28.8	28.7	27.6
31:30	28.5	27.8	28.9	28.7	27.6
31:45	28.5	27.8	28.9	28.8	27.6
32: 0	28.6	27.9	29.0	28.8	27.7
32:15	28.6	27.9	29.0	28.8	27.6
32:30	28.6	27.9	29.0	28.8	27.7
32:45	28.6	27.9	29.0	28.8	27.7
33: 0	28.6	27.9	29.0	28.8	27.7
33:15	28.6	27.9	29.0	28.8	27.7
33:30	28.7	28.0	29.1	28.9	27.7

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
33:45	28.7	28.0	29.1	28.9	27.7
34: 0	28.7	28.0	29.1	28.9	27.8
34:15	28.8	28.0	29.1	29.0	27.8
34:30	28.8	28.0	29.2	29.0	27.8
34:45	28.8	28.1	29.2	29.1	27.9
35: 0	28.9	28.1	29.3	29.1	27.9
35:15	28.9	28.1	29.3	29.1	27.9
35:30	28.9	28.2	29.4	29.2	28.0
35:45	28.9	28.2	29.3	29.2	28.0
36: 0	29.0	28.2	29.4	29.2	28.0
36:15	29.0	28.2	29.3	29.2	28.0
36:30	29.0	28.3	29.4	29.3	28.0
36:45	29.1	28.3	29.5	29.3	28.0
37: 0	29.1	28.3	29.5	29.4	28.1
37:15	29.1	28.3	29.5	29.4	28.1
37:30	29.1	28.4	29.6	29.5	28.1
37:45	29.1	28.4	29.6	29.5	28.1
38: 0	29.1	28.4	29.6	29.4	28.1
38:15	29.1	28.4	29.6	29.5	28.1
38:30	29.1	28.4	29.6	29.5	28.1
38:45	29.2	28.4	29.6	29.5	28.2
39: 0	29.2	28.4	29.7	29.5	28.2
39:15	29.2	28.4	29.6	29.5	28.2
39:30	29.2	28.4	29.7	29.5	28.2
39:45	29.3	28.5	29.8	29.6	28.2
40: 0	29.4	28.5	29.8	29.7	28.3
40:15	29.3	28.5	29.8	29.7	28.3

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
40:30	29.4	28.6	29.9	29.8	28.3
40:45	29.4	28.6	29.9	29.9	28.4
41: 0	29.6	28.9	30.1	30.0	28.5
41:15	29.6	28.8	30.1	30.0	28.5

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
0:0	28.1	28.2	28.2	28.3	28.3	28.2	28.0	28.0	27.6	27.9	27.8
0:15	28.5	28.7	28.7	28.7	28.9	28.7	28.5	28.5	28.2	28.0	27.9
0:30	33.8	34.4	34.5	33.5	34.9	34.3	33.2	33.6	32.8	28.2	28.2
0:45	45.9	48.0	47.5	45.4	49.2	47.5	44.1	45.9	44.1	29.1	28.9
1:0	62.7	67.0	66.0	62.8	69.9	67.4	60.0	64.2	61.5	31.1	30.8
1:15	81.7	88.0	87.1	83.2	92.9	90.1	79.1	85.7	82.1	34.3	33.9
1:30	101.4	108.8	108.5	104.2	115.9	112.9	99.1	107.9	103.2	38.7	38.2
1:45	117.6	126.4	126.1	121.8	134.6	131.6	114.5	126.1	119.8	44.0	43.5
2:0	131.6	140.3	135.3	136.6	150.1	143.0	127.6	140.6	128.9	49.7	49.2
2:15	142.6	152.6	150.0	145.2	164.7	157.4	137.6	152.5	136.9	55.2	54.9
2:30	154.9	166.8	165.4	159.0	179.7	172.8	148.6	165.9	150.0	60.1	59.5
2:45	167.6	181.4	181.4	173.7	195.2	188.5	162.0	180.2	164.6	64.9	65.9
3:0	180.6	196.6	197.2	189.1	210.6	204.3	175.9	194.3	178.6	71.4	73.1
3:15	193.4	211.1	212.4	204.5	225.0	219.5	189.6	207.7	192.4	78.1	80.8
3:30	205.7	224.8	226.7	219.6	238.8	234.0	203.0	220.9	205.5	85.0	89.4
3:45	217.4	238.1	239.8	233.9	252.4	247.6	216.3	233.9	218.2	92.3	97.8
4:0	228.9	250.8	253.4	247.8	265.7	261.0	228.2	246.5	231.1	100.4	106.2
4:15	240.1	263.3	266.5	261.5	278.9	274.1	240.7	258.7	244.1	108.2	115.0
4:30	251.4	275.3	278.9	275.2	291.6	287.0	253.5	270.9	256.8	116.5	124.1

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
4:45	263.2	287.8	291.5	289.1	304.2	299.7	266.8	283.1	269.5	124.3	133.0
5: 0	275.0	300.5	304.0	303.4	317.1	313.0	279.6	295.4	282.4	132.1	142.0
5:15	287.2	312.8	316.3	318.5	329.9	327.2	291.4	307.6	295.2	140.7	150.7
5:30	298.4	325.9	330.7	333.0	343.1	341.0	303.4	320.4	308.3	148.6	159.5
5:45	309.7	338.9	343.7	347.5	356.3	354.4	317.6	333.1	321.7	156.0	168.7
6: 0	321.3	351.4	356.3	361.2	369.1	367.8	330.2	345.6	334.5	164.0	177.1
6:15	332.6	362.5	367.9	374.0	381.2	380.7	342.9	357.7	346.7	171.8	185.8
6:30	344.7	372.6	378.8	386.2	392.6	393.2	354.9	369.4	358.1	179.5	193.9
6:45	355.9	381.4	389.7	398.1	402.8	404.7	364.8	381.4	368.0	187.8	202.0
7: 0	366.2	390.5	399.8	410.0	412.2	416.0	374.6	393.6	378.4	195.6	209.5
7:15	376.0	400.4	410.4	420.7	420.6	426.5	383.3	404.9	389.6	203.1	216.9
7:30	385.7	409.4	420.5	430.1	428.2	436.1	392.2	415.1	401.1	210.1	224.0
7:45	395.2	417.5	429.3	437.5	435.2	443.4	400.8	423.9	410.9	217.1	230.3
8: 0	404.9	424.7	435.8	443.5	441.9	448.5	408.3	430.9	418.9	224.2	237.0
8:15	413.7	431.0	442.2	448.9	448.3	452.9	416.3	436.7	424.8	229.9	243.5
8:30	422.1	436.4	444.7	454.4	454.2	456.7	423.4	441.5	429.2	236.3	250.2
8:45	429.4	440.7	447.3	459.9	459.6	461.3	428.3	446.0	432.5	243.2	256.6
9: 0	434.9	445.4	451.6	465.4	464.9	465.9	431.9	450.2	436.0	249.7	262.5
9:15	440.1	450.5	457.4	470.7	470.0	469.8	437.7	455.0	439.8	255.2	267.9

**COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
9:30	445.5	455.2	462.7	475.8	474.8	473.7	443.1	459.8	444.2	260.4	272.9
9:45	450.2	460.7	468.9	480.8	479.3	477.9	448.5	464.6	448.7	264.9	278.5
10: 0	454.5	465.7	472.8	485.6	483.7	482.2	454.4	468.9	453.1	269.9	283.5
10:15	459.2	470.4	476.8	490.1	487.8	485.5	458.8	472.6	456.9	274.9	288.6
10:30	464.3	473.9	480.1	494.2	491.6	488.8	461.9	476.4	460.5	280.5	293.2
10:45	468.7	477.4	483.6	498.1	495.0	491.9	465.6	480.0	464.1	286.5	298.4
11: 0	472.3	480.9	487.0	501.4	498.2	495.1	468.0	483.5	468.0	292.2	303.4
11:15	476.3	484.4	489.5	504.6	501.5	497.8	472.7	487.3	471.8	297.0	308.5
11:30	479.8	488.4	493.4	507.7	504.7	500.9	477.3	490.9	475.3	301.6	313.6
11:45	483.0	491.7	496.3	510.6	507.6	503.6	479.8	494.0	478.6	307.5	318.6
12: 0	485.8	494.6	498.7	513.2	510.7	506.0	482.3	496.6	481.7	313.0	323.3
12:15	488.6	497.5	502.0	515.4	513.7	508.3	485.3	499.3	484.5	318.1	327.7
12:30	492.3	500.5	504.4	518.0	516.7	511.2	489.1	502.1	487.3	323.2	332.6
12:45	495.7	503.5	506.2	520.5	519.6	514.1	492.5	505.3	490.6	328.4	337.5
13: 0	499.1	506.0	508.8	522.9	522.5	516.6	495.5	508.3	493.2	333.5	342.3
13:15	502.2	508.6	509.7	525.3	525.1	519.3	497.9	510.7	496.2	338.0	347.7
13:30	505.5	511.1	513.3	527.7	527.7	521.4	501.0	513.6	498.4	342.5	351.9
13:45	508.9	513.3	515.7	530.2	530.0	523.5	503.3	515.8	500.8	347.7	356.3
14: 0	511.5	515.5	518.9	532.7	532.5	526.1	505.5	518.5	503.4	352.5	360.8

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
14:15	514.8	517.9	522.7	535.1	534.8	528.8	508.1	521.2	505.8	356.5	364.6
14:30	517.7	520.6	525.6	537.6	537.3	531.7	511.3	523.9	508.3	360.8	368.5
14:45	520.6	522.7	527.7	540.2	539.8	534.0	514.0	526.6	510.6	364.8	371.9
15: 0	522.9	525.4	531.2	542.6	542.1	536.5	516.4	529.4	513.5	368.6	376.1
15:15	525.6	527.5	532.7	544.9	544.4	538.8	518.4	532.0	515.8	372.7	380.2
15:30	528.5	529.6	537.1	547.3	546.7	541.1	520.8	534.8	518.1	376.6	383.6
15:45	530.8	531.6	540.4	549.7	548.9	543.6	522.6	536.7	520.6	380.2	387.2
16: 0	533.4	533.6	543.5	551.9	551.2	545.9	525.3	539.4	522.5	384.2	390.1
16:15	536.8	536.0	545.4	554.1	553.5	548.0	528.3	541.3	524.8	387.4	393.6
16:30	539.6	538.8	547.1	556.7	556.1	550.6	529.8	543.9	527.7	390.8	397.3
16:45	542.6	541.0	550.5	559.3	559.0	553.2	532.0	546.7	530.1	394.7	399.8
17: 0	545.4	543.8	554.9	562.0	562.0	556.4	535.7	549.9	533.3	397.2	402.7
17:15	548.2	546.9	556.9	565.0	565.4	559.4	539.4	552.7	536.7	399.2	405.1
17:30	551.4	549.9	558.5	567.9	568.8	562.6	542.6	555.6	540.3	402.3	408.6
17:45	553.4	553.1	564.8	570.6	572.3	566.4	544.3	559.0	544.2	405.4	411.0
18: 0	555.7	556.7	569.0	573.5	575.6	569.5	548.8	562.5	547.6	407.4	413.3
18:15	559.3	560.3	572.6	576.5	578.9	572.5	552.4	565.6	550.8	409.8	416.0
18:30	563.0	562.2	574.9	579.4	581.8	574.9	554.7	568.4	553.9	413.4	418.5
18:45	565.7	564.6	575.7	582.2	584.8	577.9	557.2	570.9	556.5	417.3	421.5

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
19: 0	567.8	568.3	580.3	585.2	588.3	581.8	560.2	574.1	560.5	419.7	423.9
19:15	570.7	571.4	584.4	588.2	591.9	585.0	562.5	577.3	564.2	423.5	426.4
19:30	572.9	575.3	588.3	591.0	595.4	588.4	565.9	580.5	568.1	425.9	428.7
19:45	576.2	578.5	590.5	594.0	598.7	591.6	569.5	583.6	571.4	428.4	431.0
20: 0	579.7	581.0	593.3	596.9	601.7	594.4	572.3	586.5	574.3	432.2	433.4
20:15	581.8	584.1	597.2	599.3	604.7	597.7	574.6	589.6	577.4	435.4	436.6
20:30	583.0	586.8	599.9	601.9	607.6	600.9	578.6	592.6	580.3	437.4	439.6
20:45	584.9	589.4	602.6	604.5	610.4	603.5	582.6	595.5	583.3	439.2	442.0
21: 0	588.2	591.5	604.3	606.8	612.8	606.1	584.6	597.7	586.0	443.8	445.1
21:15	590.4	594.2	607.5	608.9	615.4	609.3	585.8	600.4	589.1	447.3	448.0
21:30	592.5	597.2	609.9	611.0	618.0	611.4	588.6	603.1	592.1	449.8	450.8
21:45	594.5	599.5	611.9	612.9	620.5	614.3	591.4	605.5	595.0	451.5	453.7
22: 0	597.3	601.9	613.9	615.5	622.7	616.6	593.4	607.4	597.8	454.5	456.2
22:15	598.7	603.9	616.0	617.9	624.8	619.1	594.9	609.5	600.4	457.1	458.5
22:30	600.2	605.9	616.9	620.1	626.9	621.7	597.6	611.8	602.7	459.2	461.9
22:45	602.4	607.3	618.0	622.2	628.8	623.8	600.0	613.7	604.8	461.7	465.2
23: 0	604.3	608.7	618.9	624.4	630.6	625.8	602.5	615.5	607.6	464.8	468.3
23:15	605.5	610.0	621.5	626.6	632.2	627.5	604.8	617.4	609.7	466.9	470.3
23:30	607.1	611.7	624.0	628.7	633.8	630.4	606.3	619.2	612.0	468.6	472.4

**COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
23:45	608.1	614.0	624.4	630.7	635.6	632.2	607.8	620.8	614.0	469.4	474.5
24: 0	609.5	615.3	626.2	632.6	637.3	634.2	609.4	622.8	616.3	471.4	476.1
24:15	611.9	616.5	626.8	634.0	638.9	635.4	611.2	624.9	618.7	474.1	477.9
24:30	612.8	618.2	628.1	635.2	640.4	637.4	612.6	626.4	620.6	476.5	480.3
24:45	613.8	619.8	629.9	636.6	642.2	639.3	614.8	628.3	622.5	478.2	481.9
25: 0	615.0	621.2	631.8	638.2	643.9	641.5	616.0	630.0	624.8	480.5	483.5
25:15	615.3	623.2	634.1	639.7	645.9	643.4	618.0	632.0	627.0	480.9	484.3
25:30	617.0	624.9	634.8	641.5	648.0	645.6	621.9	634.4	629.2	481.7	485.6
25:45	619.3	626.5	637.1	643.5	649.9	647.8	623.1	636.0	631.6	483.6	486.8
26: 0	620.0	628.5	636.7	645.3	651.7	649.6	625.3	637.8	633.7	484.7	487.7
26:15	621.8	629.7	640.6	647.6	653.3	651.5	626.7	639.7	635.6	487.6	488.5
26:30	623.6	631.4	641.3	649.1	655.0	653.4	629.6	641.6	637.6	488.6	490.0
26:45	625.4	633.1	642.5	650.5	656.8	655.2	631.8	643.6	639.6	489.4	490.8
27: 0	626.3	635.0	643.8	651.7	658.2	657.2	632.7	645.4	641.6	490.3	491.7
27:15	627.5	636.0	643.8	652.8	659.5	658.7	634.9	647.2	643.5	492.0	493.4
27:30	629.4	637.1	646.0	654.5	660.7	660.1	636.5	648.7	645.1	494.1	494.6
27:45	630.0	639.2	648.0	655.7	662.3	662.3	638.4	650.6	647.1	494.7	495.6
28: 0	631.5	640.5	648.6	657.2	663.9	663.7	640.1	652.3	648.6	497.1	496.6
28:15	632.7	642.2	651.6	658.6	665.3	665.5	641.5	654.2	650.6	498.2	497.2

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
28:30	634.3	644.0	652.7	659.7	666.8	666.9	643.6	655.7	652.6	499.8	498.5
28:45	635.6	645.4	653.6	661.1	668.5	668.2	645.4	657.6	654.4	500.6	499.2
29: 0	637.3	646.2	655.9	662.8	670.1	670.1	647.8	658.9	656.1	502.6	500.4
29:15	638.1	647.7	657.9	664.1	671.6	671.6	649.0	661.0	658.2	502.5	501.7
29:30	638.6	649.7	658.3	665.3	673.3	672.5	651.0	662.7	660.0	503.5	502.1
29:45	639.5	651.4	659.6	666.9	674.7	674.0	653.6	664.9	661.6	503.4	503.1
30: 0	642.6	652.0	659.7	668.7	676.4	675.3	656.3	666.4	663.6	505.8	503.8
30:15	646.1	653.0	662.8	670.0	677.9	676.7	659.3	668.6	665.6	508.0	504.5
30:30	647.0	655.3	665.3	671.9	679.7	678.9	659.6	670.7	667.6	509.0	505.9
30:45	647.7	657.6	667.8	673.4	681.3	680.9	662.2	673.0	669.9	508.4	506.7
31: 0	650.0	659.3	668.3	674.6	683.4	682.3	664.5	675.2	672.1	509.4	507.4
31:15	652.1	660.7	671.0	676.1	685.1	683.8	665.9	677.0	673.9	511.7	508.5
31:30	654.0	662.5	672.6	677.6	686.6	685.1	668.3	678.8	675.7	513.4	509.5
31:45	655.2	663.9	672.4	678.9	688.1	686.1	669.6	680.1	677.4	515.6	510.4
32: 0	656.7	664.9	674.9	680.2	689.5	687.4	671.0	681.7	678.8	518.3	511.1
32:15	657.8	665.9	676.7	681.8	690.4	688.9	673.3	683.1	680.4	517.9	512.6
32:30	660.1	667.5	677.7	683.1	691.5	690.1	674.7	684.6	682.3	518.9	513.8
32:45	660.1	668.8	679.8	683.9	692.7	691.3	675.8	685.6	683.8	519.8	515.6
33: 0	662.3	669.6	680.6	684.6	693.6	692.4	677.8	686.9	685.6	521.3	517.5

**COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1**

**DATE: 26 MAY 1993
FILE: 146CG-1.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
33:15	663.7	671.3	681.4	685.3	694.6	693.4	678.5	687.8	686.8	521.3	519.2
33:30	664.9	671.9	682.8	686.1	695.4	694.8	678.8	688.7	687.9	522.3	520.6
33:45	665.1	673.1	683.4	686.9	696.2	695.9	679.7	690.1	689.0	522.0	521.9
34: 0	666.5	674.3	685.2	687.9	697.5	698.0	681.6	691.7	690.6	521.0	523.8
34:15	669.7	676.2	686.8	689.0	698.9	700.0	685.7	694.2	692.4	520.6	523.9
34:30	672.9	678.4	687.8	690.3	700.5	702.8	688.5	696.6	694.4	521.3	525.5
34:45	674.7	679.7	690.6	691.4	701.9	705.5	689.6	698.6	696.6	523.2	526.7
35: 0	676.8	681.3	691.6	692.6	703.2	707.9	690.9	700.3	698.5	524.5	527.6
35:15	678.4	682.0	693.3	693.7	704.3	709.5	691.5	701.3	700.1	526.8	528.1
35:30	678.9	682.8	694.1	694.9	705.2	712.0	692.3	702.6	701.8	526.5	529.2
35:45	681.2	683.3	695.4	696.0	706.0	713.9	693.2	703.3	702.9	528.1	530.2
36: 0	682.0	684.0	696.7	697.1	706.7	715.3	693.7	704.1	704.3	528.3	531.5
36:15	682.0	684.8	697.8	698.1	707.5	716.8	694.9	704.9	705.2	527.5	532.7
36:30	683.2	685.0	699.7	699.1	708.2	717.6	695.3	705.8	706.2	528.4	533.7
36:45	683.9	685.7	700.1	699.9	708.9	718.4	696.5	706.5	707.3	528.3	535.2
37: 0	684.5	686.5	700.4	700.6	709.8	719.1	697.5	707.2	708.5	528.5	536.5
37:15	686.6	687.1	701.8	701.0	710.5	719.4	699.6	707.6	709.6	529.5	537.1
37:30	686.1	687.9	702.1	701.8	711.3	720.7	699.5	708.4	710.4	528.6	538.2
37:45	687.3	689.2	702.5	702.1	712.1	721.1	700.6	709.3	712.1	529.4	539.2

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 1

DATE: 26 MAY 1993
FILE: 146CG-1.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
38: 0	688.2	689.6	704.2	702.4	713.1	721.8	702.0	710.1	713.7	529.6	541.1
38:15	689.5	690.1	704.6	702.9	714.3	722.7	703.3	711.3	715.4	530.0	542.3
38:30	690.6	690.8	706.2	703.8	715.5	723.2	705.4	712.6	717.0	530.0	543.2
38:45	692.6	691.9	707.5	704.7	716.8	723.9	706.7	713.9	719.0	531.2	543.6
39: 0	694.0	693.3	708.9	705.6	718.2	725.1	708.7	715.4	720.9	532.3	544.2
39:15	695.8	694.9	710.5	706.6	719.2	726.1	709.8	716.5	722.3	533.5	545.6
39:30	697.1	696.5	711.7	707.5	720.4	727.0	711.9	717.8	723.6	533.6	546.4
39:45	698.2	696.8	712.9	708.4	721.5	727.5	713.8	718.7	725.6	535.0	547.9
40: 0	700.1	697.4	714.3	708.9	722.2	728.3	714.4	719.8	726.8	536.6	549.7
40:15	701.7	700.4	714.9	709.1	722.8	729.1	715.0	0.0	728.1	538.0	551.2
40:30	703.4	721.2	715.7	710.1	720.9	729.6	714.2	0.0	728.2	539.6	557.1
40:45	701.9	724.9	712.6	709.8	0.0	717.8	711.1	0.0	724.9	539.5	559.1
41: 0	699.9	724.5	709.9	706.2	0.0	712.8	706.4	0.0	719.3	538.0	555.9
41:15	696.3	722.6	705.8	702.8	0.0	708.6	699.7	0.0	712.7	535.2	553.7

TEST NO. 2

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
0: 0	58.8	59.8	58.3	58.6	56.4	58.4	-34.9
0:15	132.6	144.6	128.2	129.1	110.3	129.0	132.0
0:30	423.3	444.7	422.0	449.5	450.3	437.9	-34.9
0:45	563.8	576.4	531.7	564.0	725.8	592.3	12.5
1: 0	588.3	612.4	585.0	579.1	697.2	612.4	-10.0
1:15	543.9	562.9	568.3	520.0	563.9	551.8	-2.5
1:30	534.9	560.7	554.4	517.9	539.4	541.5	10.0
1:45	528.3	549.2	544.2	497.1	521.5	528.1	10.0
2: 0	526.4	547.9	542.2	494.4	504.8	523.1	5.0
2:15	530.4	552.0	545.1	507.2	515.7	530.1	5.0
2:30	524.0	554.7	546.5	510.3	518.1	530.7	2.5
2:45	539.4	561.1	549.8	514.8	520.9	537.2	7.5
3: 0	534.6	554.7	544.0	508.8	520.7	532.6	7.5
3:15	546.0	556.1	550.2	519.1	528.3	539.9	7.5
3:30	542.0	561.6	551.3	530.2	527.2	542.4	7.5
3:45	547.2	566.6	558.3	530.0	529.9	546.4	5.0
4: 0	551.2	581.9	566.8	535.0	543.2	555.6	7.5
4:15	562.8	583.7	570.5	549.5	552.0	563.7	7.5
4:30	570.0	587.7	576.9	563.8	556.1	570.9	7.5
4:45	570.2	596.7	582.5	551.9	562.2	572.7	12.5
5: 0	582.4	607.9	597.9	572.2	577.7	587.6	12.5
5:15	597.9	615.6	605.5	579.5	588.8	597.5	10.0
5:30	595.9	621.5	612.9	593.5	592.3	603.2	10.0
5:45	604.4	630.4	621.2	598.8	600.9	611.1	10.0
6: 0	613.0	637.9	629.0	606.5	609.1	619.1	10.0
6:15	616.5	645.5	631.9	599.9	611.9	621.1	10.0
6:30	625.7	651.2	646.1	608.4	626.7	631.6	12.5

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
6:45	629.9	660.6	651.1	620.2	636.2	639.6	12.5
7: 0	642.1	662.3	652.7	622.2	634.3	642.7	17.4
7:15	647.1	665.2	659.6	631.0	644.5	649.5	14.9
7:30	651.4	677.0	669.9	639.5	654.5	658.4	12.5
7:45	662.0	681.5	670.6	649.3	657.0	664.1	12.5
8: 0	651.8	684.1	674.2	644.7	663.7	663.7	7.5
8:15	669.2	685.6	679.5	653.4	674.4	672.4	10.0
8:30	670.6	693.1	684.2	651.9	673.8	674.7	10.0
8:45	669.1	696.4	687.5	659.5	677.9	678.1	7.5
9: 0	679.1	698.5	688.5	659.5	673.7	679.9	10.0
9:15	668.0	702.0	689.5	661.0	678.9	679.9	10.0
9:30	685.5	710.3	701.2	659.7	704.0	692.2	10.0
9:45	680.9	705.6	704.4	668.2	703.6	692.5	10.0
10: 0	697.3	714.6	707.3	682.1	703.2	700.9	10.0
10:15	689.6	724.6	721.3	685.0	720.9	708.3	12.5
10:30	693.8	727.0	718.1	683.9	713.1	707.2	10.0
10:45	701.7	722.0	715.8	692.9	722.3	711.0	10.0
11: 0	703.7	728.0	720.4	686.1	722.8	712.2	10.0
11:15	713.8	729.6	723.0	690.8	718.4	715.1	10.0
11:30	708.6	730.7	725.9	694.3	721.5	716.2	7.5
11:45	711.1	734.2	730.9	694.3	726.5	719.4	12.5
12: 0	718.8	737.2	737.2	703.7	729.9	725.4	10.0
12:15	716.3	739.1	735.1	698.3	727.3	723.2	12.5
12:30	719.0	744.1	738.9	705.6	740.8	729.7	10.0
12:45	719.1	745.1	742.1	707.0	734.5	729.6	12.5
13: 0	724.6	747.7	747.1	716.9	748.7	737.0	10.0
13:15	728.1	750.4	746.7	715.7	743.8	736.9	10.0

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
13:30	738.3	755.5	748.2	715.3	752.8	742.0	10.0
13:45	728.9	754.8	750.4	720.8	753.1	741.6	10.0
14: 0	720.5	757.7	756.4	725.4	752.9	742.6	10.0
14:15	734.2	763.5	757.3	725.4	763.6	748.8	12.5
14:30	747.8	763.9	760.9	729.1	764.3	753.2	10.0
14:45	739.7	765.9	759.9	735.7	765.7	753.4	10.0
15: 0	746.9	768.3	765.9	728.3	765.2	754.9	12.5
15:15	745.4	768.9	766.0	733.1	772.1	757.1	10.0
15:30	756.1	772.8	772.3	735.2	774.7	762.2	7.5
15:45	750.7	779.9	776.4	737.7	779.8	764.9	10.0
16: 0	755.0	781.5	776.1	751.2	781.1	769.0	7.5
16:15	756.9	780.6	778.3	747.5	784.9	769.6	10.0
16:30	763.5	784.2	781.2	748.1	789.0	773.2	10.0
16:45	759.1	787.4	783.0	755.9	787.6	774.6	12.5
17: 0	752.7	790.0	785.3	754.3	792.5	775.0	10.0
17:15	753.9	792.7	786.2	755.5	793.1	776.3	10.0
17:30	768.7	795.3	786.0	768.5	790.3	781.8	10.0
17:45	766.6	800.4	793.4	772.5	800.5	786.7	10.0
18: 0	773.8	798.4	790.9	771.5	792.9	785.5	10.0
18:15	773.5	798.1	798.4	770.9	799.4	788.0	12.5
18:30	767.2	800.7	801.8	768.4	804.5	788.5	12.5
18:45	775.0	802.5	801.8	775.7	801.7	791.4	10.0
19: 0	769.5	807.4	806.0	775.6	805.8	792.8	7.5
19:15	772.6	811.0	808.1	780.2	810.3	796.5	7.5
19:30	787.1	815.1	807.4	788.2	802.4	800.0	10.0
19:45	795.9	815.8	807.7	801.5	807.5	805.7	7.5
20: 0	785.3	816.7	812.1	789.5	809.0	802.5	5.0

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
20:15	793.2	815.9	809.2	807.3	812.3	807.6	10.0
20:30	788.7	819.5	813.0	797.5	809.3	805.6	10.0
20:45	790.7	812.6	812.5	794.3	816.3	805.3	10.0
21: 0	793.0	820.7	815.0	787.4	818.1	806.9	12.5
21:15	795.4	822.1	815.1	808.5	813.1	810.8	10.0
21:30	799.6	819.7	822.0	807.2	812.4	812.2	7.5
21:45	795.3	820.4	815.0	794.1	817.9	808.5	10.0
22: 0	803.6	824.3	821.2	805.0	820.5	814.9	10.0
22:15	802.0	827.1	819.0	821.5	815.0	816.9	10.0
22:30	797.4	829.3	826.1	810.3	814.7	815.5	7.5
22:45	799.7	830.4	826.1	807.3	821.2	816.9	10.0
23: 0	804.8	831.7	827.0	824.4	818.4	821.3	7.5
23:15	804.7	826.8	825.9	808.6	824.8	818.2	10.0
23:30	799.1	832.4	826.8	813.7	821.0	818.6	7.5
23:45	799.0	831.5	830.5	817.8	828.5	821.5	10.0
24: 0	807.2	834.4	827.5	809.2	821.8	820.0	12.5
24:15	808.4	831.4	829.6	801.0	831.0	820.3	5.0
24:30	798.1	833.4	828.2	804.4	831.1	819.0	10.0
24:45	809.5	837.8	830.2	813.2	829.6	824.1	10.0
25: 0	810.5	835.5	829.6	817.2	824.3	823.4	10.0
25:15	804.0	837.5	838.0	826.6	821.5	825.5	10.0
25:30	809.9	840.7	839.8	828.4	828.3	829.4	7.5
25:45	815.4	841.6	836.9	833.9	831.1	831.8	10.0
26: 0	818.4	845.9	839.9	835.1	829.8	833.8	10.0
26:15	811.4	848.3	841.2	837.5	821.9	832.1	10.0
26:30	817.2	845.1	840.9	850.3	832.3	837.1	7.5
26:45	825.1	845.0	840.8	845.1	831.1	837.4	12.5

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
27: 0	822.9	853.0	851.2	850.5	832.8	842.1	12.5
27:15	823.1	851.6	854.2	849.8	837.3	843.2	7.5
27:30	813.9	851.5	856.0	853.2	835.1	841.9	7.5
27:45	815.7	856.7	850.8	853.0	837.9	842.8	10.0
28: 0	828.6	856.7	857.9	852.6	832.4	845.6	10.0
28:15	819.9	861.1	856.6	850.1	834.3	844.4	10.0
28:30	821.2	862.8	860.3	844.9	837.6	845.4	10.0
28:45	828.5	858.5	862.2	854.0	839.7	848.6	10.0
29: 0	834.8	865.4	861.9	860.3	842.1	852.9	10.0
29:15	837.5	867.7	864.1	862.2	846.2	855.5	10.0
29:30	833.1	870.1	862.3	863.2	844.1	854.6	10.0
29:45	832.7	872.4	870.9	857.5	848.3	856.4	12.5
30: 0	840.6	875.9	874.9	862.2	849.2	860.5	12.5
30:15	837.4	880.6	875.8	853.8	853.8	860.3	12.5
30:30	840.1	884.8	881.9	869.8	855.8	866.5	7.5
30:45	845.5	882.4	888.4	863.5	858.6	867.7	12.5
31: 0	847.6	886.2	891.4	868.2	857.7	870.2	10.0
31:15	849.5	891.8	887.7	854.9	859.2	868.6	12.5
31:30	842.4	891.9	883.8	864.3	863.1	869.1	12.5
31:45	849.4	896.5	890.6	868.2	866.8	874.3	12.5
32: 0	853.0	895.4	891.1	875.1	866.5	876.2	10.0
32:15	853.5	894.1	896.4	878.4	864.8	877.5	10.0
32:30	858.5	897.1	891.4	881.8	866.9	879.1	10.0
32:45	851.5	899.4	894.1	868.9	870.4	876.9	10.0
33: 0	857.3	901.8	900.0	880.0	867.5	881.3	12.5
33:15	855.7	900.9	894.1	877.7	871.3	880.0	5.0
33:30	855.5	902.6	903.5	877.5	868.5	881.5	12.5

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
33:45	854.5	897.6	901.5	881.4	868.7	880.7	10.0
34: 0	861.2	901.0	897.9	875.2	873.8	881.8	10.0
34:15	858.0	900.3	903.7	876.9	877.1	883.2	10.0
34:30	864.0	903.0	899.3	889.6	872.3	885.6	10.0
34:45	864.7	904.4	900.9	891.8	874.3	887.2	10.0
35: 0	862.3	904.5	903.4	884.1	876.4	886.1	10.0
35:15	860.5	904.7	906.2	888.7	875.0	887.0	12.5
35:30	863.0	907.2	902.1	893.5	876.2	888.4	10.0
35:45	860.4	909.0	903.3	874.4	878.8	885.2	10.0
36: 0	861.8	907.5	901.3	897.2	879.9	889.5	10.0
36:15	862.9	908.6	903.2	888.6	876.6	888.0	7.5
36:30	864.5	906.8	906.8	895.0	875.7	889.8	7.5
36:45	871.5	911.2	904.3	894.9	872.5	890.9	7.5
37: 0	873.3	908.1	905.1	886.1	869.7	888.5	0.0
37:15	876.7	903.1	896.6	880.2	867.2	884.8	0.0
37:30	871.6	889.0	869.7	858.2	742.3	846.2	2.5
37:45	861.3	878.5	843.2	828.3	710.2	824.3	-2.5

COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
0: 0	0.1	0.1	0.1	0.0	0.1
0:15	0.3	0.3	0.3	0.2	0.3
0:30	2.2	2.5	1.9	1.8	2.3
0:45	3.4	3.7	2.9	2.8	3.9
1: 0	3.4	3.4	2.6	2.3	3.0
1:15	2.4	2.4	1.8	1.5	2.2
1:30	2.5	2.5	1.9	1.5	2.4
1:45	2.5	2.4	1.9	1.3	2.3
2: 0	2.7	2.7	2.1	1.4	2.5
2:15	3.0	3.0	2.3	1.5	2.8
2:30	3.2	3.2	2.5	1.6	3.0
2:45	3.4	3.5	2.7	1.7	3.2
3: 0	3.7	3.7	2.8	1.8	3.4
3:15	3.9	4.0	3.0	1.8	3.6
3:30	4.2	4.3	3.3	2.0	3.9
3:45	4.5	4.6	3.5	2.2	4.2
4: 0	4.9	5.1	3.9	2.4	4.6
4:15	5.2	5.4	4.2	2.6	4.9
4:30	5.6	5.8	4.5	2.8	5.3
4:45	5.9	6.2	4.8	3.0	5.6
5: 0	6.4	6.8	5.3	3.4	6.2
5:15	6.9	7.3	5.7	3.7	6.6
5:30	7.4	7.8	6.0	4.0	7.0
5:45	7.9	8.3	6.5	4.3	7.5
6: 0	8.4	8.8	6.9	4.6	8.0
6:15	8.9	9.4	7.4	5.0	8.5
6:30	9.4	10.0	7.9	5.4	9.1

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
6:45	9.9	10.5	8.3	5.7	9.5
7: 0	10.4	11.0	8.7	6.0	10.0
7:15	11.0	11.6	9.2	6.4	10.6
7:30	11.6	12.2	9.7	6.8	11.2
7:45	12.0	12.7	10.1	7.1	11.6
8: 0	12.6	13.3	10.5	7.4	12.0
8:15	13.0	13.7	10.9	7.8	12.5
8:30	13.5	14.2	11.4	8.1	12.9
8:45	13.9	14.7	11.8	8.4	13.4
9: 0	14.3	15.1	12.1	8.7	13.8
9:15	14.8	15.6	12.5	9.0	14.2
9:30	15.3	16.2	13.0	9.4	14.8
9:45	15.8	16.7	13.5	9.8	15.2
10: 0	16.2	17.2	13.9	10.1	15.7
10:15	16.8	17.8	14.4	10.6	16.4
10:30	17.2	18.2	14.8	10.9	16.7
10:45	17.6	18.6	15.1	11.1	17.0
11: 0	17.9	19.0	15.4	11.4	17.3
11:15	18.3	19.3	15.8	11.6	17.7
11:30	18.6	19.7	16.1	11.9	18.0
11:45	19.0	20.2	16.4	12.2	18.5
12: 0	19.3	20.5	16.8	12.5	18.9
12:15	19.7	20.8	17.1	12.8	19.1
12:30	20.1	21.2	17.4	13.0	19.5
12:45	20.4	21.5	17.8	13.3	19.8
13: 0	20.8	22.0	18.2	13.7	20.3
13:15	21.2	22.4	18.5	13.9	20.6

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
13:30	21.5	22.7	18.8	14.2	21.0
13:45	21.8	23.0	19.1	14.4	21.2
14: 0	22.1	23.3	19.4	14.7	21.6
14:15	22.5	23.7	19.7	15.0	22.0
14:30	22.8	24.0	20.1	15.2	22.3
14:45	23.0	24.3	20.3	15.4	22.6
15: 0	23.3	24.6	20.6	15.7	22.9
15:15	23.7	25.0	21.0	16.1	23.3
15:30	24.1	25.4	21.4	16.4	23.8
15:45	24.5	25.8	21.8	16.8	24.2
16: 0	24.8	26.1	22.1	17.0	24.5
16:15	25.1	26.5	22.4	17.3	24.8
16:30	25.5	26.8	22.7	17.5	25.1
16:45	25.7	27.1	23.0	17.8	25.5
17: 0	26.1	27.3	23.2	18.0	25.6
17:15	26.2	27.6	23.5	18.2	26.0
17:30	26.7	28.0	23.9	18.6	26.5
17:45	27.0	28.4	24.2	18.9	26.9
18: 0	27.4	28.8	24.5	19.2	27.2
18:15	27.6	29.0	24.8	19.4	27.4
18:30	27.9	29.3	25.1	19.6	27.7
18:45	28.1	29.6	25.3	19.9	28.0
19: 0	28.5	30.0	25.6	20.1	28.3
19:15	28.8	30.3	25.9	20.4	28.7
19:30	29.2	30.6	26.3	20.7	29.1
19:45	29.5	30.9	26.5	20.9	29.4
20: 0	29.8	31.1	26.7	21.1	29.6

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
20:15	30.0	31.3	26.9	21.3	29.9
20:30	30.3	31.6	27.2	21.5	30.2
20:45	30.4	31.7	27.3	21.6	30.4
21: 0	30.6	32.0	27.5	21.8	30.5
21:15	30.8	32.2	27.7	21.9	30.8
21:30	30.9	32.4	27.8	22.0	30.8
21:45	31.1	32.5	28.0	22.2	31.0
22: 0	31.3	32.8	28.2	22.4	31.4
22:15	31.7	33.1	28.5	22.7	31.7
22:30	31.9	33.4	28.7	22.9	31.8
22:45	32.0	33.5	28.8	23.0	32.1
23: 0	32.3	33.8	29.0	23.2	32.3
23:15	32.5	34.0	29.2	23.4	32.4
23:30	32.6	34.1	29.3	23.4	32.6
23:45	32.8	34.3	29.5	23.6	32.8
24: 0	33.0	34.5	29.7	23.7	32.9
24:15	33.1	34.7	29.8	23.9	33.0
24:30	33.2	34.7	29.9	23.9	33.2
24:45	33.4	34.9	30.1	24.1	33.3
25: 0	33.5	35.1	30.2	24.2	33.4
25:15	33.7	35.3	30.5	24.5	33.7
25:30	33.9	35.7	30.8	24.8	34.0
25:45	34.3	35.9	31.0	24.9	34.1
26: 0	34.4	36.2	31.1	25.1	34.3
26:15	34.6	36.3	31.3	25.2	34.5
26:30	34.8	36.6	31.5	25.5	34.8
26:45	35.0	36.8	31.7	25.6	35.1

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
27: 0	35.4	37.4	32.2	26.1	35.7
27:15	35.6	37.6	32.4	26.3	35.9
27:30	35.8	37.9	32.6	26.5	36.1
27:45	36.1	38.2	32.9	26.7	36.5
28: 0	36.2	38.5	33.1	26.9	36.6
28:15	36.6	38.9	33.4	27.1	37.0
28:30	36.7	39.2	33.6	27.4	37.3
28:45	36.8	39.3	33.8	27.5	37.5
29: 0	37.3	39.7	34.2	27.9	37.8
29:15	37.5	40.1	34.5	28.2	38.3
29:30	37.7	40.6	34.8	28.5	38.6
29:45	38.3	41.0	35.2	28.8	39.1
30: 0	38.7	41.6	35.6	29.2	39.5
30:15	39.1	41.9	36.0	29.5	39.8
30:30	39.7	42.8	36.5	30.1	40.5
30:45	40.1	43.4	37.1	30.6	41.1
31: 0	40.6	43.8	37.5	30.9	41.4
31:15	41.1	44.1	37.7	31.2	41.7
31:30	41.4	44.5	38.1	31.5	42.1
31:45	41.8	45.0	38.4	31.8	42.5
32: 0	42.0	45.2	38.6	32.0	42.7
32:15	42.2	45.4	38.8	32.2	42.9
32:30	42.5	45.7	39.1	32.4	43.2
32:45	42.7	45.9	39.3	32.6	43.4
33: 0	42.9	46.2	39.6	32.8	43.6
33:15	43.2	46.3	39.8	33.0	43.8
33:30	43.3	46.6	39.9	33.1	44.0

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
33:45	43.4	46.7	40.0	33.2	44.1
34: 0	43.7	46.9	40.3	33.4	44.4
34:15	43.8	47.0	40.5	33.6	44.5
34:30	43.9	47.4	40.6	33.7	44.8
34:45	44.1	47.4	40.7	33.9	44.9
35: 0	44.4	47.5	40.9	34.0	45.0
35:15	44.3	47.6	41.0	34.1	45.1
35:30	44.5	47.9	41.3	34.3	45.5
35:45	44.6	48.0	41.4	34.4	45.5
36: 0	44.7	48.0	41.6	34.5	45.6
36:15	44.7	48.3	41.7	34.7	45.7
36:30	45.0	48.5	41.9	34.8	45.7
36:45	45.0	48.6	42.1	35.0	45.7
37: 0	45.9	48.4	42.4	35.2	45.6
37:15	45.9	67.9	49.4	40.1	45.1
37:30	45.6	68.4	48.2	38.7	44.8
37:45	44.9	63.8	45.1	36.0	41.8

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
0: 0	25.3	25.2	25.2	25.2	25.2
0:15	25.3	25.2	25.2	25.2	25.1
0:30	25.3	25.2	25.2	25.2	25.1
0:45	25.3	25.3	25.3	25.3	25.1
1: 0	25.3	25.3	25.3	25.3	25.2
1:15	25.3	25.2	25.3	25.3	25.2
1:30	25.3	25.2	25.3	25.3	25.2
1:45	25.3	25.2	25.3	25.3	25.1
2: 0	25.3	25.2	25.3	25.3	25.1
2:15	25.3	25.2	25.3	25.3	25.2
2:30	25.3	25.2	25.3	25.3	25.1
2:45	25.3	25.3	25.3	25.3	25.1
3: 0	25.3	25.2	25.3	25.3	25.2
3:15	25.3	25.3	25.3	25.3	25.2
3:30	25.4	25.3	25.3	25.3	25.2
3:45	25.4	25.3	25.3	25.3	25.2
4: 0	25.4	25.3	25.3	25.3	25.2
4:15	25.4	25.3	25.3	25.3	25.2
4:30	25.3	25.3	25.3	25.3	25.2
4:45	25.4	25.3	25.4	25.3	25.2
5: 0	25.4	25.3	25.4	25.3	25.2
5:15	25.4	25.3	25.4	25.4	25.2
5:30	25.4	25.3	25.4	25.4	25.2
5:45	25.4	25.3	25.4	25.4	25.2
6: 0	25.5	25.3	25.5	25.4	25.2
6:15	25.5	25.4	25.5	25.5	25.3
6:30	25.5	25.4	25.6	25.5	25.3

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
6:45	25.5	25.4	25.6	25.5	25.3
7: 0	25.6	25.4	25.6	25.6	25.3
7:15	25.6	25.4	25.6	25.6	25.3
7:30	25.6	25.5	25.7	25.6	25.3
7:45	25.6	25.5	25.7	25.6	25.4
8: 0	25.6	25.5	25.7	25.7	25.4
8:15	25.7	25.5	25.8	25.7	25.4
8:30	25.7	25.6	25.8	25.7	25.4
8:45	25.7	25.6	25.8	25.7	25.4
9: 0	25.7	25.6	25.9	25.8	25.5
9:15	25.8	25.6	25.9	25.8	25.5
9:30	25.8	25.7	25.9	25.8	25.5
9:45	25.8	25.7	26.0	25.9	25.5
10: 0	25.9	25.7	26.0	25.9	25.5
10:15	25.9	25.7	26.0	25.9	25.6
10:30	25.9	25.8	26.1	26.0	25.6
10:45	26.0	25.8	26.1	26.0	25.6
11: 0	26.0	25.8	26.2	26.0	25.7
11:15	26.0	25.8	26.2	26.1	25.7
11:30	26.0	25.9	26.2	26.1	25.7
11:45	26.1	25.9	26.3	26.1	25.7
12: 0	26.1	25.9	26.3	26.2	25.7
12:15	26.2	26.0	26.3	26.2	25.8
12:30	26.2	26.0	26.4	26.2	25.8
12:45	26.3	26.0	26.4	26.3	25.8
13: 0	26.2	26.0	26.5	26.3	25.9
13:15	26.3	26.1	26.5	26.4	25.9

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
13:30	26.4	26.1	26.6	26.4	25.9
13:45	26.4	26.1	26.6	26.5	26.0
14: 0	26.4	26.2	26.6	26.5	26.0
14:15	26.4	26.2	26.7	26.5	26.0
14:30	26.5	26.2	26.7	26.5	26.0
14:45	26.5	26.2	26.7	26.5	26.0
15: 0	26.6	26.3	26.8	26.6	26.1
15:15	26.5	26.3	26.8	26.6	26.1
15:30	26.6	26.3	26.8	26.6	26.1
15:45	26.6	26.3	26.8	26.6	26.1
16: 0	26.6	26.3	26.9	26.7	26.1
16:15	26.6	26.3	26.9	26.7	26.1
16:30	26.7	26.4	27.0	26.7	26.2
16:45	26.7	26.4	27.0	26.8	26.2
17: 0	26.7	26.4	27.0	26.8	26.2
17:15	26.7	26.4	27.0	26.8	26.2
17:30	26.8	26.5	27.1	26.9	26.3
17:45	26.8	26.5	27.1	26.9	26.3
18: 0	26.8	26.5	27.1	26.9	26.3
18:15	26.9	26.5	27.2	27.0	26.3
18:30	26.9	26.6	27.2	27.0	26.4
18:45	26.9	26.6	27.3	27.0	26.4
19: 0	27.0	26.6	27.3	27.1	26.4
19:15	27.0	26.6	27.3	27.1	26.4
19:30	27.0	26.7	27.3	27.1	26.4
19:45	27.0	26.7	27.4	27.2	26.4
20: 0	27.1	26.7	27.4	27.2	26.5

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
20:15	27.1	26.7	27.4	27.2	26.5
20:30	27.2	26.7	27.5	27.3	26.5
20:45	27.2	26.8	27.5	27.3	26.6
21: 0	27.2	26.8	27.6	27.3	26.6
21:15	27.2	26.8	27.5	27.3	26.6
21:30	27.2	26.9	27.6	27.4	26.6
21:45	27.3	26.9	27.6	27.4	26.6
22: 0	27.3	26.9	27.6	27.4	26.7
22:15	27.4	26.9	27.7	27.5	26.7
22:30	27.3	26.9	27.7	27.5	26.7
22:45	27.4	27.0	27.7	27.5	26.7
23: 0	27.4	27.0	27.7	27.5	26.7
23:15	27.4	27.0	27.8	27.5	26.7
23:30	27.4	27.0	27.7	27.5	26.7
23:45	27.4	27.0	27.8	27.6	26.7
24: 0	27.5	27.0	27.8	27.6	26.7
24:15	27.5	27.0	27.8	27.6	26.7
24:30	27.5	27.0	27.8	27.6	26.8
24:45	27.5	27.0	27.8	27.6	26.8
25: 0	27.5	27.0	27.8	27.6	26.7
25:15	27.5	27.0	27.8	27.6	26.8
25:30	27.5	27.0	27.9	27.6	26.8
25:45	27.5	27.0	27.9	27.6	26.8
26: 0	27.5	27.1	27.8	27.6	26.8
26:15	27.5	27.1	27.9	27.7	26.8
26:30	27.5	27.1	27.9	27.6	26.8
26:45	27.5	27.1	27.9	27.7	26.8

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
27: 0	27.5	27.1	27.9	27.6	26.8
27:15	27.6	27.1	27.9	27.7	26.8
27:30	27.6	27.1	28.0	27.7	26.8
27:45	27.6	27.1	27.9	27.7	26.8
28: 0	27.6	27.1	27.9	27.7	26.8
28:15	27.6	27.1	27.9	27.7	26.8
28:30	27.6	27.1	27.9	27.7	26.8
28:45	27.6	27.1	27.9	27.7	26.8
29: 0	27.6	27.1	28.0	27.7	26.8
29:15	27.6	27.1	27.9	27.7	26.8
29:30	27.6	27.1	28.0	27.8	26.8
29:45	27.6	27.1	28.0	27.7	26.8
30: 0	27.6	27.1	28.0	27.7	26.8
30:15	27.6	27.1	28.0	27.8	26.9
30:30	27.6	27.1	28.0	27.8	26.9
30:45	27.6	27.1	28.0	27.8	26.9
31: 0	27.7	27.1	28.1	27.9	26.9
31:15	27.7	27.2	28.1	27.8	26.9
31:30	27.7	27.2	28.2	27.9	26.9
31:45	27.7	27.2	28.2	27.9	26.9
32: 0	27.8	27.3	28.2	27.9	27.0
32:15	27.8	27.3	28.2	27.9	27.0
32:30	27.8	27.3	28.2	28.0	27.0
32:45	27.8	27.3	28.2	28.0	27.0
33: 0	27.8	27.3	28.2	28.0	27.0
33:15	27.8	27.3	28.3	28.0	27.1
33:30	27.8	27.3	28.3	28.0	27.0

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 2**

**DATE: 26 MAY 1993
FILE: 146CG-2.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
33:45	27.9	27.3	28.3	28.1	27.1
34: 0	27.9	27.4	28.4	28.1	27.1
34:15	27.9	27.4	28.4	28.2	27.1
34:30	27.9	27.4	28.4	28.2	27.1
34:45	28.0	27.4	28.4	28.2	27.1
35: 0	27.9	27.4	28.4	28.2	27.1
35:15	28.0	27.4	28.4	28.2	27.1
35:30	28.0	27.5	28.5	28.3	27.1
35:45	28.0	27.4	28.5	28.2	27.2
36: 0	28.0	27.5	28.5	28.3	27.1
36:15	28.1	27.5	28.5	28.3	27.2
36:30	28.1	27.5	28.6	28.3	27.2
36:45	28.0	27.5	28.6	28.3	27.2
37: 0	28.0	27.5	28.5	28.3	27.1
37:15	28.1	27.5	28.6	28.4	27.2
37:30	28.0	27.5	28.6	28.4	27.2
37:45	28.1	27.6	28.6	28.4	27.2

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
0: 0	36.4	36.6	36.8	37.2	37.5	37.7	37.0	37.6	37.5	35.4	35.0
0:15	36.6	36.8	37.1	37.5	37.8	38.1	37.3	38.0	37.8	35.5	35.0
0:30	41.4	41.9	42.6	42.7	44.0	43.8	41.6	44.0	43.4	35.7	35.4
0:45	55.5	56.3	57.9	57.6	59.9	59.3	56.1	62.9	59.3	36.3	36.4
1: 0	75.9	76.9	79.5	78.8	81.9	81.2	79.0	89.7	82.2	38.2	38.8
1:15	94.2	96.2	99.2	98.3	101.3	101.4	98.7	110.8	102.0	41.1	41.7
1:30	109.8	113.2	116.2	115.0	116.6	119.4	113.8	127.2	118.2	44.8	45.8
1:45	123.8	129.1	132.0	128.6	124.8	136.2	127.0	139.5	133.3	48.9	50.5
2: 0	137.1	144.0	144.4	141.0	136.3	148.8	137.2	151.7	147.3	53.0	54.7
2:15	147.9	157.7	158.6	154.7	148.2	163.7	148.6	165.3	160.3	57.6	60.0
2:30	159.4	171.7	172.2	167.9	160.0	178.5	161.1	178.5	174.2	62.6	66.3
2:45	171.3	184.5	185.1	180.7	172.3	192.9	173.5	191.0	186.7	68.3	72.6
3: 0	183.3	196.7	198.1	193.2	183.9	206.1	185.4	203.0	199.6	74.0	79.3
3:15	195.3	208.5	210.3	205.1	194.6	218.5	196.9	214.4	211.3	80.0	86.7
3:30	206.5	219.1	221.1	216.5	204.7	230.1	207.2	225.2	222.4	86.1	94.4
3:45	217.7	228.9	231.9	227.3	214.4	241.5	217.1	235.9	232.9	93.1	102.3
4: 0	228.8	239.2	242.8	238.0	224.2	252.8	227.6	246.5	244.1	99.5	110.0
4:15	239.7	249.7	253.6	248.9	234.0	264.1	238.0	257.1	255.1	105.8	118.0
4:30	250.3	260.3	264.8	259.9	244.0	275.6	248.2	268.0	266.4	112.0	125.8

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
4:45	261.3	270.2	275.5	270.7	254.1	287.1	258.7	278.5	276.9	118.7	133.6
5: 0	272.1	280.3	286.7	281.6	264.5	298.8	269.5	289.2	287.9	125.7	141.8
5:15	283.1	291.2	298.2	292.7	275.2	311.2	280.5	300.4	299.6	132.3	149.9
5:30	294.4	302.2	309.6	304.4	286.0	323.9	291.3	312.0	311.5	139.6	157.7
5:45	305.4	313.9	321.7	316.5	297.3	336.8	302.9	323.6	323.5	146.5	165.4
6: 0	317.3	325.4	335.1	328.8	309.2	350.1	315.3	335.4	335.5	153.1	174.1
6:15	329.3	336.5	346.8	340.9	321.4	363.3	327.1	346.8	346.9	160.6	182.7
6:30	340.4	347.3	358.8	353.1	334.0	376.7	339.1	358.1	358.3	167.6	190.3
6:45	351.4	357.1	369.6	365.0	346.3	389.9	351.2	369.6	370.1	174.5	199.0
7: 0	362.5	366.9	381.6	377.1	357.9	403.2	362.7	380.8	382.9	181.8	206.8
7:15	372.7	375.9	392.9	389.8	369.3	415.7	373.8	392.3	395.9	189.1	214.6
7:30	382.8	385.9	402.4	402.6	381.3	426.3	384.4	403.4	407.8	197.0	222.5
7:45	393.5	395.6	413.1	414.6	394.1	434.7	395.1	413.1	419.3	204.5	229.2
8: 0	404.3	405.2	422.8	425.2	406.5	441.6	405.5	421.3	429.0	211.3	236.5
8:15	415.1	414.8	431.7	434.6	417.0	448.1	416.5	428.4	436.5	217.3	242.9
8:30	424.6	422.5	438.8	441.5	424.5	454.3	427.1	434.6	443.1	223.1	249.7
8:45	432.3	429.6	444.0	446.6	429.9	460.0	435.4	440.6	449.2	228.9	256.5
9: 0	439.3	435.1	449.9	451.8	433.3	466.0	443.1	446.7	455.4	234.3	262.9
9:15	445.8	439.8	454.5	457.1	436.2	471.7	448.5	452.5	461.5	241.7	269.3

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
9:30	451.5	444.4	460.1	462.4	439.6	477.3	453.8	458.6	467.6	247.5	275.5
9:45	457.6	451.2	466.7	467.8	443.5	483.1	459.6	464.4	473.7	252.1	280.8
10: 0	463.2	456.7	472.8	472.8	448.0	488.8	464.0	469.8	479.7	257.9	286.6
10:15	468.8	463.3	478.7	478.2	453.2	494.5	469.4	476.1	486.0	262.5	292.8
10:30	473.9	469.3	485.0	483.9	457.9	499.8	475.0	481.9	491.5	267.2	299.0
10:45	479.2	475.1	490.6	489.3	462.5	504.6	480.9	487.4	496.9	271.9	306.1
11: 0	486.0	479.2	495.4	494.4	467.3	508.6	486.3	491.6	501.5	279.1	312.7
11:15	493.7	482.3	501.1	499.3	471.1	512.4	491.4	495.6	506.1	286.5	318.2
11:30	497.9	488.2	504.6	503.5	474.7	515.8	496.1	500.4	509.9	290.1	325.8
11:45	502.1	492.8	508.7	506.7	478.1	518.9	500.4	504.1	513.1	294.5	332.7
12: 0	506.9	496.3	510.1	511.0	481.4	521.7	505.5	508.1	516.0	299.3	340.7
12:15	513.4	498.9	514.1	514.3	484.3	524.7	509.2	510.6	518.6	307.0	347.1
12:30	515.2	502.8	519.4	517.0	486.7	527.8	512.4	514.1	521.5	310.6	353.5
12:45	518.1	507.5	523.3	520.2	489.6	530.9	516.6	517.3	524.2	314.6	360.9
13: 0	521.1	510.1	526.0	522.9	492.1	533.8	519.9	520.0	526.7	319.8	368.4
13:15	524.0	512.2	529.3	525.7	494.8	536.8	523.5	522.6	529.5	324.9	375.9
13:30	527.1	513.5	533.4	529.2	497.7	539.8	527.1	525.2	532.9	329.6	383.6
13:45	530.3	518.6	537.0	532.3	500.7	542.4	530.5	528.2	535.4	334.1	391.1
14: 0	535.5	520.0	538.5	534.9	503.0	544.8	533.5	530.7	537.9	341.3	398.2

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
14:15	537.9	522.2	542.7	537.3	505.4	547.8	534.8	533.1	540.8	348.2	403.9
14:30	539.0	525.2	546.2	539.4	507.8	550.9	536.7	535.8	543.9	354.2	409.7
14:45	543.4	527.0	549.3	541.7	510.1	553.5	539.0	537.9	546.3	361.6	413.9
15: 0	545.2	529.9	552.9	544.6	512.1	556.3	541.4	540.9	548.7	366.8	418.4
15:15	547.2	533.5	555.6	547.6	514.7	558.4	545.4	543.8	551.2	370.4	421.3
15:30	549.5	535.8	559.0	550.5	517.7	561.0	549.0	546.7	554.1	374.7	425.6
15:45	554.3	539.3	561.5	553.6	520.4	563.9	552.4	549.7	556.7	380.7	429.2
16: 0	558.1	540.4	566.2	556.5	523.6	566.9	555.6	552.2	559.8	387.1	431.7
16:15	560.7	544.7	569.4	559.4	526.8	570.0	558.6	555.3	562.6	392.7	434.4
16:30	563.2	547.3	573.3	562.1	530.0	573.0	561.9	558.1	565.3	396.9	438.2
16:45	566.5	550.4	575.9	564.8	532.8	575.7	565.2	560.8	568.1	400.7	440.9
17: 0	568.9	552.9	578.6	566.8	535.3	578.1	567.8	563.2	570.7	404.8	443.2
17:15	570.8	554.5	580.2	568.8	537.7	580.6	570.8	565.7	573.0	409.7	444.7
17:30	574.2	557.0	581.9	571.8	540.7	583.1	574.3	569.0	575.6	414.4	447.3
17:45	577.6	559.2	586.1	574.5	543.6	585.8	577.7	571.7	578.3	419.1	449.6
18: 0	578.8	562.7	587.5	576.5	546.3	588.3	580.5	574.8	581.1	421.9	450.9
18:15	582.0	564.8	589.5	579.2	549.2	590.7	584.1	577.4	583.6	426.3	453.4
18:30	584.8	568.4	592.3	582.0	552.4	593.4	587.6	580.6	586.4	429.4	455.1
18:45	588.3	570.7	594.2	584.4	555.2	595.6	590.8	583.1	589.0	433.3	457.4

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
19: 0	590.2	574.2	597.3	586.7	558.2	598.4	593.7	585.9	591.9	435.6	460.3
19:15	591.7	575.6	600.8	588.7	561.0	601.3	596.5	588.5	594.1	437.7	462.7
19:30	592.4	579.5	602.4	590.4	564.0	603.5	598.8	591.0	596.4	439.1	464.0
19:45	595.1	581.5	605.5	592.2	566.8	605.9	602.0	593.8	598.7	442.7	466.3
20: 0	598.1	581.2	607.5	594.4	569.7	608.2	604.7	596.2	601.4	445.1	468.3
20:15	601.6	585.2	608.9	596.5	572.8	610.5	607.5	599.0	603.4	447.1	469.8
20:30	604.3	589.4	612.6	598.3	575.4	612.9	610.4	601.6	605.4	448.8	473.2
20:45	606.5	590.7	615.3	600.1	577.7	614.4	613.1	603.2	607.2	450.9	475.5
21: 0	608.4	592.2	616.0	601.6	580.1	615.7	614.8	605.1	609.0	453.4	476.5
21:15	609.2	594.3	617.4	603.1	582.1	617.2	616.9	606.9	610.6	454.6	478.2
21:30	609.2	595.6	619.7	604.0	584.0	618.5	617.6	608.3	612.5	456.5	480.3
21:45	609.8	597.4	621.9	605.6	586.1	620.4	619.9	609.8	614.6	456.3	483.8
22: 0	612.8	598.6	624.0	606.8	588.1	621.8	621.4	611.2	616.2	459.4	485.5
22:15	613.6	600.9	626.3	608.6	590.3	623.5	623.6	613.7	618.0	459.5	486.9
22:30	614.5	603.0	627.3	610.2	592.3	625.1	625.6	615.7	619.9	460.0	488.0
22:45	617.3	603.6	629.0	611.6	594.4	627.1	627.6	617.8	621.5	463.1	490.4
23: 0	620.4	605.1	630.4	613.7	596.3	628.4	630.5	619.7	623.4	465.6	491.4
23:15	622.0	607.2	632.1	615.4	598.2	629.8	633.1	621.5	625.1	466.8	493.0
23:30	623.7	608.4	633.8	616.9	600.1	631.5	634.9	623.3	627.0	467.9	494.5

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
23:45	625.1	609.4	635.0	618.6	601.3	632.9	636.8	624.6	628.5	468.6	495.8
24: 0	626.2	610.9	636.8	620.3	602.8	634.5	638.3	626.1	629.9	469.1	497.2
24:15	627.8	613.4	638.6	621.6	604.5	635.7	639.4	627.4	631.1	470.6	498.8
24:30	629.8	614.6	639.5	622.9	605.9	637.0	641.0	628.9	632.6	471.9	499.8
24:45	631.2	616.3	640.4	624.2	607.2	638.4	642.2	630.3	633.6	472.8	501.8
25: 0	631.8	616.9	641.1	625.5	608.1	639.6	643.7	631.5	635.1	473.4	502.9
25:15	633.1	616.9	642.0	626.6	609.3	641.1	644.9	632.2	636.6	475.6	504.5
25:30	635.8	616.1	643.9	628.2	610.6	642.9	646.6	633.8	637.7	478.2	504.9
25:45	637.9	619.3	645.2	629.9	612.1	644.4	648.8	635.8	639.7	478.9	505.4
26: 0	637.8	621.1	646.2	631.1	613.4	645.9	650.9	638.0	641.3	478.9	506.3
26:15	639.2	622.6	647.7	632.1	615.0	647.6	652.8	639.6	642.9	480.0	507.7
26:30	642.1	623.5	648.9	633.8	616.6	649.2	655.1	641.9	644.5	481.4	508.6
26:45	644.4	624.1	650.3	635.2	617.9	650.6	656.3	644.0	645.8	483.9	509.3
27: 0	644.5	626.7	652.2	637.5	619.6	652.5	658.9	646.5	647.8	483.4	510.4
27:15	646.1	628.4	653.3	639.5	621.9	654.5	661.4	648.9	650.0	484.0	512.4
27:30	646.8	629.3	655.7	641.3	623.8	656.5	663.4	651.2	651.7	485.3	512.4
27:45	649.6	630.8	657.3	643.4	625.5	658.2	666.2	653.8	653.8	486.6	513.4
28: 0	651.1	631.9	659.2	645.3	626.8	660.1	668.4	655.9	655.7	488.6	514.5
28:15	652.4	634.0	661.6	647.3	628.9	662.5	670.4	658.5	658.0	490.0	516.4

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
28:30	652.9	635.9	663.0	649.0	630.7	664.5	672.0	660.4	660.2	490.6	518.3
28:45	654.1	636.5	664.4	651.3	632.8	666.2	674.3	663.0	662.1	491.1	518.9
29: 0	657.7	638.2	666.0	652.9	634.6	668.1	676.8	665.4	664.2	492.2	521.0
29:15	660.1	640.6	668.4	655.4	636.8	669.9	679.4	667.7	665.4	493.4	521.6
29:30	661.2	641.3	670.4	657.4	639.2	672.3	682.0	670.2	667.8	495.1	522.7
29:45	661.8	641.7	672.8	659.3	641.8	674.6	683.9	673.0	670.0	495.6	523.5
30: 0	663.5	644.0	675.5	662.1	645.0	677.3	686.2	675.9	672.6	496.3	525.0
30:15	666.2	647.8	677.6	664.7	648.3	679.5	688.0	678.8	675.1	497.3	527.8
30:30	670.0	649.8	680.5	667.7	651.0	681.6	690.1	681.5	677.6	498.8	527.9
30:45	673.0	652.5	682.7	671.1	655.2	683.9	692.6	685.0	681.1	500.5	528.8
31: 0	676.2	653.8	685.1	674.4	658.6	686.1	695.0	687.4	683.7	502.1	529.8
31:15	677.8	656.7	686.9	676.8	661.9	688.4	698.0	690.1	686.6	502.9	531.2
31:30	680.7	658.4	689.2	679.4	664.8	690.8	700.8	692.5	688.8	503.8	531.5
31:45	682.6	661.0	690.8	681.8	667.5	693.5	703.4	695.1	691.0	504.4	532.5
32: 0	684.9	663.4	693.3	683.8	669.7	696.5	706.0	697.8	693.7	507.2	533.2
32:15	687.2	666.0	695.6	685.6	671.9	699.4	708.2	700.4	697.2	509.1	534.4
32:30	690.3	667.5	697.9	687.4	673.8	702.1	710.5	702.9	700.1	512.0	536.3
32:45	691.9	668.7	699.6	688.4	675.3	703.9	712.1	705.0	702.4	513.6	538.2
33: 0	692.9	670.9	700.2	689.6	676.7	706.1	714.4	707.0	704.9	515.4	539.7

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 2

DATE: 26 MAY 1993
FILE: 146CG-2.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
33:15	694.3	674.2	701.1	690.9	678.3	708.0	716.0	708.8	706.9	516.8	542.3
33:30	695.2	675.7	702.0	691.9	679.5	709.3	717.5	710.3	708.4	517.9	543.3
33:45	696.7	676.5	703.2	692.9	680.3	710.7	719.0	711.6	709.7	519.3	545.8
34: 0	697.8	677.4	704.3	694.0	681.4	711.7	720.3	713.3	711.8	520.7	547.3
34:15	699.0	678.4	704.6	695.1	682.2	712.6	721.4	714.5	713.7	521.9	548.9
34:30	700.3	678.4	704.7	696.4	683.1	713.4	722.8	715.8	714.8	523.9	549.4
34:45	701.3	679.7	705.1	697.6	684.0	714.0	724.4	717.3	715.9	525.3	550.5
35: 0	702.4	680.8	705.7	699.0	685.2	714.8	725.5	718.6	717.2	526.3	552.1
35:15	703.3	681.8	705.9	700.2	686.2	715.5	726.7	719.5	719.0	527.4	553.9
35:30	704.2	682.7	706.0	701.0	686.6	715.9	728.1	720.1	720.0	528.6	555.0
35:45	705.4	686.3	706.0	701.6	687.4	716.1	729.0	720.9	720.8	530.3	556.1
36: 0	705.9	690.4	706.4	702.2	688.0	716.3	730.2	721.6	722.1	530.9	558.2
36:15	706.6	697.5	706.4	702.8	690.7	716.5	730.8	721.9	722.9	531.4	560.0
36:30	707.7	704.5	706.1	703.6	694.0	716.5	731.7	722.2	723.8	532.0	561.5
36:45	708.2	708.3	706.7	704.4	696.8	716.8	732.3	722.1	724.9	533.2	562.6
37: 0	716.6	714.0	706.8	704.6	697.1	716.9	732.3	721.9	725.6	536.8	576.6
37:15	708.3	724.1	706.6	705.1	696.7	717.2	731.8	721.3	725.3	533.7	576.4
37:30	706.6	727.2	704.2	703.4	0.0	714.8	729.1	720.0	723.6	536.3	572.9
37:45	704.9	726.5	701.6	700.2	0.0	711.0	724.1	714.7	718.7	535.9	573.8

TEST NO. 3

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
0: 0	54.8	53.2	51.9	51.9	50.6	52.5	-19.9
0:15	115.1	125.0	101.4	98.1	104.1	108.7	104.6
0:30	322.4	342.4	305.5	312.7	249.6	306.5	-84.7
0:45	404.5	442.4	392.5	387.1	348.1	394.9	-29.9
1: 0	412.0	434.8	411.8	389.4	378.7	405.3	-2.5
1:15	393.6	406.5	403.1	376.4	371.8	390.3	10.0
1:30	392.9	403.1	405.2	376.7	367.6	389.1	10.0
1:45	417.2	444.9	436.3	410.7	405.3	422.9	12.5
2: 0	460.5	487.7	481.9	464.1	451.1	469.1	14.9
2:15	493.5	506.6	515.5	475.6	481.7	494.6	10.0
2:30	498.3	513.3	515.1	472.5	479.9	495.8	5.0
2:45	494.1	511.6	502.7	464.7	471.6	488.9	7.5
3: 0	488.6	512.7	503.4	464.0	479.8	489.7	7.5
3:15	502.3	516.4	511.2	472.0	482.2	496.8	10.0
3:30	509.4	540.5	530.9	495.3	496.5	514.5	12.5
3:45	534.7	563.9	553.4	514.7	526.8	538.7	12.5
4: 0	547.9	575.3	573.0	530.5	539.2	553.2	12.5
4:15	553.5	589.3	579.8	538.2	550.5	562.3	12.5
4:30	573.5	599.2	585.2	540.9	559.0	571.6	12.5
4:45	569.8	605.8	596.2	556.7	570.9	579.9	12.5
5: 0	573.9	610.1	598.0	560.5	582.2	584.9	10.0
5:15	586.4	618.3	605.4	574.5	584.7	593.9	12.5
5:30	585.1	618.5	605.0	575.7	599.0	596.7	12.5
5:45	602.9	625.7	615.3	580.6	595.2	604.0	12.5
6: 0	605.9	631.7	622.7	584.0	595.1	607.9	10.0
6:15	599.6	634.3	625.4	584.9	596.9	608.2	12.5
6:30	597.5	641.6	632.4	591.5	607.7	614.1	10.0

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
6:45	614.8	650.1	643.4	601.3	622.0	626.3	12.5
7: 0	626.9	654.2	649.4	614.3	638.2	636.6	12.5
7:15	630.3	661.0	656.1	612.3	648.2	641.6	10.0
7:30	638.3	667.4	660.7	619.5	649.5	647.1	12.5
7:45	639.3	671.6	661.3	626.9	657.6	651.3	12.5
8: 0	654.0	677.5	669.2	628.7	668.2	659.5	10.0
8:15	651.2	681.6	673.2	632.9	670.1	661.8	12.5
8:30	655.0	683.8	671.9	641.6	671.3	664.7	14.9
8:45	669.0	688.1	677.7	640.8	678.5	670.8	12.5
9: 0	658.3	691.6	681.4	640.6	681.4	670.7	14.9
9:15	659.6	691.7	681.1	643.4	669.5	669.1	12.5
9:30	665.5	694.7	687.9	646.0	674.6	673.7	10.0
9:45	660.5	700.4	690.3	653.0	685.0	677.8	10.0
10: 0	671.7	704.0	697.0	655.5	686.2	682.9	7.5
10:15	679.0	707.7	700.2	664.0	695.4	689.2	10.0
10:30	687.3	713.7	704.0	663.3	699.5	693.5	10.0
10:45	687.6	715.1	709.0	671.3	697.2	696.0	10.0
11: 0	694.0	716.8	709.2	671.3	707.2	699.7	7.5
11:15	687.7	720.5	709.3	679.1	707.5	700.8	10.0
11:30	689.5	724.9	714.5	678.4	717.8	705.0	7.5
11:45	698.5	730.1	720.4	682.9	710.4	708.4	10.0
12: 0	697.3	733.0	722.6	686.7	723.0	712.5	7.5
12:15	706.4	733.8	726.3	686.2	730.5	716.6	10.0
12:30	713.4	739.8	731.0	691.8	724.9	720.2	7.5
12:45	714.8	738.1	730.2	698.5	730.0	722.3	7.5
13: 0	714.1	743.7	735.0	699.8	734.4	725.4	7.5
13:15	722.7	743.9	734.2	705.3	738.9	729.0	7.5

COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
13:30	714.1	745.0	734.0	710.1	739.1	728.5	10.0
13:45	717.3	748.5	742.1	715.2	737.6	732.2	10.0
14: 0	719.2	751.4	745.9	711.8	745.3	734.7	10.0
14:15	717.6	749.4	747.0	717.8	744.1	735.2	10.0
14:30	719.7	754.0	748.1	718.8	751.5	738.4	10.0
14:45	719.4	752.7	748.9	722.2	754.9	739.6	10.0
15: 0	725.1	755.1	750.8	720.9	751.7	740.7	10.0
15:15	734.7	758.7	754.0	728.3	758.2	746.8	10.0
15:30	728.1	763.6	752.1	730.6	761.3	747.2	10.0
15:45	736.9	766.8	758.4	729.7	762.6	750.9	10.0
16: 0	738.0	766.9	761.9	737.0	762.9	753.4	10.0
16:15	744.0	770.8	767.1	741.0	763.6	757.3	10.0
16:30	736.6	770.0	769.5	741.4	768.9	757.3	12.5
16:45	749.1	775.7	771.3	736.5	767.8	760.1	10.0
17: 0	743.8	777.0	773.9	748.8	779.3	764.6	10.0
17:15	743.7	780.8	777.0	747.7	781.1	766.0	10.0
17:30	749.0	780.7	775.6	751.7	782.6	767.9	10.0
17:45	750.4	779.5	776.6	751.5	784.3	768.5	10.0
18: 0	747.1	781.9	777.8	752.8	784.2	768.8	10.0
18:15	745.3	788.5	782.3	754.7	785.2	771.2	10.0
18:30	754.6	788.1	780.0	771.9	790.5	777.0	12.5
18:45	768.8	791.2	784.9	764.2	788.9	779.6	10.0
19: 0	767.6	788.3	785.8	766.5	792.2	780.1	10.0
19:15	759.6	793.8	790.3	763.5	795.8	780.6	10.0
19:30	766.8	789.5	786.9	772.9	798.2	782.9	10.0
19:45	759.1	795.0	787.6	768.0	787.3	779.4	10.0
20: 0	760.9	793.2	792.7	762.6	799.5	781.8	10.0

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
20:15	758.0	797.1	793.1	771.6	802.9	784.5	10.0
20:30	770.3	797.6	797.1	772.6	802.0	787.9	12.5
20:45	765.7	801.4	801.2	778.4	803.0	790.0	10.0
21: 0	783.8	805.9	803.9	801.7	798.1	798.7	12.5
21:15	777.7	811.8	805.7	790.1	809.6	799.0	12.5
21:30	790.1	812.7	806.5	793.9	811.5	803.0	12.5
21:45	780.5	814.4	809.1	796.6	812.4	802.6	12.5
22: 0	786.5	816.4	806.8	797.3	809.9	803.4	10.0
22:15	791.8	820.7	808.9	811.4	801.2	806.8	12.5
22:30	786.7	817.0	815.4	802.3	811.9	806.6	12.5
22:45	779.8	819.3	810.5	796.0	810.4	803.2	10.0
23: 0	781.3	821.7	817.2	810.1	816.5	809.4	10.0
23:15	790.2	822.4	814.4	815.1	811.7	810.8	10.0
23:30	794.6	825.6	822.8	817.7	810.8	814.3	10.0
23:45	790.4	829.2	821.2	813.3	809.2	812.7	10.0
24: 0	785.9	827.3	821.6	822.4	811.3	813.7	10.0
24:15	791.4	832.0	821.9	823.1	814.7	816.6	10.0
24:30	801.0	828.8	827.7	827.9	816.5	820.4	10.0
24:45	798.6	833.6	824.4	829.9	815.6	820.4	10.0
25: 0	796.0	837.9	824.1	827.9	817.6	820.7	12.5
25:15	806.8	833.6	828.2	838.5	820.7	825.6	12.5
25:30	802.2	838.9	827.5	823.4	818.0	822.0	10.0
25:45	796.4	841.8	833.2	836.4	817.9	825.1	10.0
26: 0	798.7	838.1	836.5	838.6	823.3	827.0	10.0
26:15	799.7	842.9	831.8	836.6	823.8	827.0	10.0
26:30	803.8	841.2	836.5	828.8	822.4	826.5	10.0
26:45	805.9	844.3	840.6	816.9	826.5	826.8	10.0

COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
27: 0	806.7	841.4	836.8	826.9	828.0	827.9	10.0
27:15	810.2	848.2	838.5	840.6	826.4	832.8	12.5
27:30	811.9	849.8	843.3	848.9	829.7	836.7	12.5
27:45	805.1	854.5	843.0	849.8	831.3	836.7	12.5
28: 0	815.6	854.0	844.7	853.6	834.7	840.5	10.0
28:15	814.8	854.3	842.0	838.3	832.4	836.4	10.0
28:30	815.4	853.8	846.9	833.7	835.5	837.1	10.0
28:45	817.7	857.4	843.6	852.2	838.6	841.9	12.5
29: 0	824.4	858.9	845.9	851.8	835.1	843.2	12.5
29:15	815.4	857.9	848.5	839.4	840.5	840.3	12.5
29:30	818.6	859.0	848.6	842.5	842.1	842.2	12.5
29:45	823.0	860.2	852.3	856.8	837.1	845.9	10.0
30: 0	830.2	862.6	856.0	857.3	836.1	848.4	12.5
30:15	827.4	865.3	854.5	857.7	843.0	849.6	10.0
30:30	824.8	866.4	855.7	862.0	844.4	850.7	12.5
30:45	831.7	866.3	858.3	860.2	842.8	851.9	12.5
31: 0	826.6	868.0	861.1	866.0	849.7	854.3	12.5
31:15	821.9	866.1	861.3	862.7	846.1	851.6	10.0
31:30	826.4	869.7	858.8	861.8	846.8	852.7	10.0
31:45	831.8	873.4	861.2	865.8	846.7	855.8	10.0
32: 0	832.0	876.7	859.7	856.6	849.0	854.8	10.0
32:15	834.2	876.8	864.9	868.3	852.8	859.4	10.0
32:30	831.1	875.7	874.1	862.3	852.1	859.1	10.0
32:45	840.9	872.4	867.1	865.9	862.8	861.8	12.5
33: 0	835.0	881.8	876.2	865.3	854.8	862.6	10.0
33:15	838.4	883.6	868.5	866.4	856.9	862.8	12.5
33:30	840.4	885.1	871.3	863.0	860.6	864.1	10.0

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
33:45	840.9	882.9	874.2	865.9	861.5	865.1	12.5
34: 0	852.4	883.5	877.4	882.3	856.9	870.5	10.0
34:15	842.3	888.0	878.2	860.5	856.0	865.0	10.0
34:30	846.6	889.9	881.6	878.4	863.6	872.0	12.5
34:45	849.5	894.1	885.9	879.8	864.4	874.7	10.0
35: 0	848.7	893.6	881.2	871.9	867.2	872.5	10.0
35:15	851.7	893.7	887.4	879.6	867.0	875.9	10.0
35:30	851.4	894.2	882.5	883.0	866.2	875.5	10.0
35:45	847.8	893.9	884.0	883.6	868.4	875.6	10.0
36: 0	856.3	898.4	888.0	892.2	867.6	880.5	10.0
36:15	858.0	895.7	889.7	886.6	867.6	879.5	10.0
36:30	855.8	900.5	888.1	868.0	869.2	876.3	10.0
36:45	853.5	900.5	886.6	884.2	874.1	879.8	10.0
37: 0	856.5	901.8	892.5	876.8	871.4	879.8	12.5
37:15	855.1	902.1	894.5	895.8	875.8	884.7	10.0
37:30	863.3	904.1	896.6	886.9	872.8	884.7	10.0
37:45	865.0	905.6	891.3	894.7	871.7	885.7	10.0
38: 0	855.2	904.4	896.4	891.8	873.4	884.2	10.0
38:15	861.9	902.9	895.7	887.0	874.7	884.4	7.5
38:30	868.0	901.4	896.2	883.1	874.2	884.5	10.0
38:45	861.8	904.4	895.3	889.4	871.4	884.5	10.0
39: 0	861.2	902.7	893.9	891.6	877.0	885.3	10.0
39:15	865.4	905.5	893.9	902.3	877.2	888.9	10.0
39:30	863.7	901.6	899.9	893.3	874.0	886.5	10.0
39:45	860.7	906.9	899.2	897.5	877.0	888.3	10.0
40: 0	867.5	909.8	896.2	891.4	877.2	888.4	10.0
40:15	863.5	908.6	903.3	892.4	877.6	889.1	12.5

**COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
40:30	861.0	908.7	896.2	886.7	879.2	886.4	10.0
40:45	869.2	906.7	902.9	896.2	878.7	890.7	10.0
41: 0	863.6	913.7	898.8	883.9	879.8	887.9	10.0
41:15	870.4	915.6	903.4	889.3	883.0	892.3	10.0
41:30	871.1	916.4	899.8	895.2	886.7	893.8	10.0
41:45	873.2	919.1	901.6	895.9	885.1	895.0	10.0
42: 0	871.5	920.6	908.0	902.3	889.4	898.4	10.0
42:15	881.9	922.6	912.9	896.7	889.8	900.8	10.0
42:30	877.9	921.7	905.0	892.8	890.5	897.6	12.5
42:45	876.4	924.6	918.1	896.3	891.8	901.4	10.0
43: 0	880.4	920.7	913.0	905.0	892.3	902.3	10.0
43:15	884.4	922.6	909.3	918.5	892.3	905.4	10.0
43:30	879.2	926.4	911.0	911.7	892.7	904.2	10.0
43:45	879.0	926.9	915.7	909.2	896.0	905.4	10.0
44: 0	885.3	926.4	914.6	908.0	893.7	905.6	10.0
44:15	883.5	924.3	918.5	917.5	897.4	908.2	10.0
44:30	887.9	927.6	916.4	919.9	898.6	910.1	10.0
44:45	884.2	926.6	910.0	910.2	898.3	905.9	10.0
45: 0	887.0	929.1	914.7	926.9	898.5	911.2	10.0
45:15	882.3	928.9	922.0	922.7	897.7	910.7	10.0
45:30	882.7	929.4	923.7	918.4	902.8	911.4	12.5
45:45	884.7	929.5	921.0	917.9	899.9	910.6	12.5
46: 0	888.3	929.8	924.0	926.3	896.5	913.0	7.5
46:15	882.3	930.9	928.5	929.0	894.9	913.1	7.5
46:30	885.3	931.2	926.0	929.1	898.4	914.0	7.5
46:45	886.8	931.1	920.0	925.3	892.9	911.2	7.5
47: 0	882.9	930.9	923.7	923.0	896.2	911.3	5.0

COAST GUARD
FURNACE TEMPERATURES (°C) AND PRESSURE (Pa)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tf 1	Tf 2	Tf 3	Tf 4	Tf 5	AVG	Pf
47:15	884.8	930.4	927.3	923.8	895.5	912.3	7.5
47:30	883.5	930.7	920.6	919.7	897.8	910.4	7.5
47:45	887.1	930.8	928.7	913.3	900.8	912.1	5.0
48: 0	886.4	935.8	931.0	914.1	894.5	912.4	7.5
48:15	890.5	938.3	926.0	932.6	898.6	917.2	5.0
48:30	875.4	892.2	912.1	912.0	898.7	898.1	-2.5
48:45	844.0	851.7	838.8	835.5	822.2	838.4	-2.5

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
0: 0	0.0	0.0	0.0	0.0	0.0
0:15	0.1	0.2	0.1	0.1	0.2
0:30	0.6	0.6	0.5	0.4	0.4
0:45	0.5	0.5	0.4	0.3	0.4
1: 0	0.5	0.5	0.4	0.3	0.4
1:15	0.5	0.5	0.4	0.2	0.4
1:30	0.6	0.6	0.4	0.3	0.5
1:45	0.8	0.9	0.7	0.5	0.8
2: 0	1.1	1.4	1.0	0.7	1.2
2:15	1.4	1.7	1.3	0.9	1.5
2:30	1.5	1.7	1.3	0.9	1.5
2:45	1.6	1.9	1.4	0.9	1.6
3: 0	1.8	2.0	1.6	1.0	1.8
3:15	2.0	2.3	1.8	1.1	2.0
3:30	2.4	2.8	2.2	1.4	2.5
3:45	2.8	3.2	2.5	1.6	2.9
4: 0	3.2	3.7	2.9	1.9	3.3
4:15	3.7	4.2	3.2	2.1	3.7
4:30	4.1	4.6	3.6	2.4	4.1
4:45	4.5	5.1	3.9	2.6	4.5
5: 0	4.9	5.5	4.3	2.8	4.9
5:15	5.4	6.0	4.7	3.1	5.3
5:30	5.8	6.4	5.1	3.3	5.7
5:45	6.2	6.9	5.4	3.6	6.2
6: 0	6.7	7.4	5.8	3.9	6.6
6:15	7.2	7.9	6.3	4.2	7.1
6:30	7.6	8.4	6.6	4.4	7.5

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
6:45	8.2	9.1	7.2	4.9	8.2
7: 0	8.7	9.7	7.7	5.3	8.8
7:15	9.3	10.3	8.2	5.6	9.3
7:30	9.8	10.8	8.6	6.0	9.8
7:45	10.3	11.4	9.1	6.3	10.3
8: 0	10.8	11.9	9.5	6.6	10.8
8:15	11.3	12.4	9.9	7.0	11.2
8:30	11.8	12.9	10.4	7.3	11.7
8:45	12.3	13.4	10.8	7.6	12.2
9: 0	12.7	13.9	11.2	7.9	12.5
9:15	13.2	14.2	11.5	8.1	12.9
9:30	13.6	14.7	11.9	8.4	13.3
9:45	13.9	15.1	12.2	8.7	13.7
10: 0	14.4	15.5	12.6	9.0	14.1
10:15	14.9	16.1	13.1	9.4	14.6
10:30	15.3	16.5	13.4	9.7	15.0
10:45	15.7	16.9	13.8	10.0	15.4
11: 0	16.1	17.4	14.2	10.3	15.9
11:15	16.5	17.8	14.5	10.6	16.2
11:30	16.9	18.1	14.9	10.9	16.6
11:45	17.4	18.6	15.3	11.3	17.1
12: 0	17.8	19.0	15.7	11.6	17.5
12:15	18.1	19.4	16.0	11.8	17.9
12:30	18.5	19.8	16.4	12.1	18.2
12:45	18.8	20.2	16.7	12.4	18.6
13: 0	19.2	20.5	17.0	12.7	19.0
13:15	19.4	20.8	17.3	12.9	19.3

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
13:30	19.8	21.1	17.6	13.2	19.6
13:45	20.1	21.5	17.9	13.5	19.9
14: 0	20.4	21.8	18.2	13.7	20.2
14:15	20.7	22.1	18.5	13.9	20.5
14:30	20.9	22.3	18.8	14.1	20.8
14:45	21.2	22.6	19.0	14.4	21.1
15: 0	21.4	22.9	19.3	14.6	21.4
15:15	21.7	23.1	19.6	14.8	21.7
15:30	22.0	23.5	19.9	15.1	22.1
15:45	22.2	23.8	20.1	15.3	22.4
16: 0	22.5	24.0	20.4	15.5	22.6
16:15	22.7	24.3	20.6	15.8	23.0
16:30	23.0	24.6	20.9	16.0	23.2
16:45	23.2	25.0	21.2	16.2	23.6
17: 0	23.5	25.3	21.5	16.5	23.9
17:15	23.8	25.5	21.8	16.7	24.2
17:30	24.0	25.8	22.0	16.9	24.5
17:45	24.3	26.1	22.3	17.1	24.8
18: 0	24.6	26.4	22.6	17.4	25.1
18:15	24.9	26.7	22.8	17.7	25.5
18:30	25.2	26.9	23.1	17.9	25.8
18:45	25.4	27.2	23.3	18.1	26.0
19: 0	25.6	27.4	23.5	18.3	26.2
19:15	25.8	27.7	23.7	18.4	26.4
19:30	25.9	27.9	23.9	18.6	26.7
19:45	26.2	28.1	24.1	18.8	27.0
20: 0	26.4	28.3	24.3	19.0	27.2

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
20:15	26.5	28.4	24.5	19.1	27.4
20:30	26.8	28.9	24.8	19.4	27.7
20:45	27.0	29.1	25.1	19.6	28.0
21: 0	27.6	29.7	25.5	20.1	28.7
21:15	27.8	30.0	25.8	20.4	28.9
21:30	28.3	30.3	26.1	20.6	29.3
21:45	28.3	30.5	26.4	20.8	29.5
22: 0	28.7	30.9	26.6	21.0	29.9
22:15	28.9	31.1	26.8	21.3	30.2
22:30	29.2	31.3	27.0	21.4	30.2
22:45	29.3	31.5	27.2	21.6	30.5
23: 0	29.6	31.7	27.4	21.8	30.8
23:15	30.0	32.1	27.8	22.1	31.3
23:30	30.3	32.5	28.1	22.4	31.6
23:45	30.6	32.8	28.4	22.6	31.9
24: 0	30.7	33.0	28.6	22.8	32.1
24:15	31.1	33.3	28.8	23.0	32.5
24:30	31.3	33.6	29.1	23.3	32.7
24:45	31.5	33.8	29.3	23.4	33.0
25: 0	31.6	34.1	29.5	23.6	33.2
25:15	31.8	34.2	29.6	23.8	33.5
25:30	32.1	34.5	29.9	23.9	33.7
25:45	32.3	34.6	30.0	24.1	33.8
26: 0	32.4	34.8	30.2	24.2	33.9
26:15	32.5	34.9	30.4	24.4	34.2
26:30	32.8	35.3	30.6	24.6	34.4
26:45	33.0	35.5	30.8	24.8	34.7

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
27: 0	33.2	35.7	31.0	25.0	34.8
27:15	33.5	36.3	31.4	25.3	35.3
27:30	33.8	36.4	31.6	25.5	35.6
27:45	33.9	36.5	31.8	25.7	35.7
28: 0	34.2	36.9	32.0	25.9	36.0
28:15	34.5	37.1	32.2	26.0	36.1
28:30	34.7	37.3	32.4	26.2	36.4
28:45	34.7	37.5	32.6	26.4	36.5
29: 0	35.0	37.7	32.8	26.6	36.8
29:15	35.3	38.1	33.1	26.8	37.2
29:30	35.5	38.3	33.3	26.9	37.2
29:45	35.5	38.4	33.4	27.1	37.5
30: 0	35.9	39.0	33.7	27.4	37.9
30:15	36.1	39.0	33.9	27.6	38.0
30:30	36.3	39.3	34.1	27.8	38.3
30:45	36.4	39.5	34.3	28.0	38.5
31: 0	36.6	39.7	34.6	28.1	38.7
31:15	36.9	39.9	34.6	28.3	38.8
31:30	36.9	40.1	34.8	28.3	39.0
31:45	37.2	40.3	35.1	28.6	39.2
32: 0	37.1	40.8	35.4	29.0	39.6
32:15	37.2	40.9	35.6	29.1	39.8
32:30	37.5	41.2	35.9	29.3	40.1
32:45	37.8	41.6	36.1	29.6	40.4
33: 0	38.0	42.1	36.5	29.9	40.8
33:15	38.3	42.3	36.7	30.2	41.1
33:30	38.5	42.7	37.0	30.4	41.4

COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
33:45	38.5	42.8	37.1	30.5	41.5
34: 0	38.7	43.0	37.3	30.7	41.8
34:15	39.2	43.4	37.6	31.0	42.0
34:30	39.6	43.9	38.0	31.4	42.5
34:45	39.8	44.0	38.3	31.6	42.7
35: 0	40.2	44.5	38.5	31.8	42.9
35:15	40.3	44.6	38.7	32.0	43.2
35:30	40.6	45.0	39.0	32.2	43.5
35:45	40.7	45.2	39.2	32.4	43.7
36: 0	40.9	45.5	39.4	32.6	43.9
36:15	41.2	45.6	39.6	32.7	44.1
36:30	41.2	45.8	39.7	32.9	44.2
36:45	41.5	45.7	39.8	33.0	44.3
37: 0	41.8	46.1	40.1	33.2	44.6
37:15	41.8	46.4	40.1	33.3	44.7
37:30	42.1	46.5	40.3	33.4	44.9
37:45	42.1	46.5	40.4	33.5	44.9
38: 0	42.3	46.7	40.5	33.6	45.1
38:15	42.5	46.8	40.7	33.7	45.1
38:30	42.4	47.0	40.8	33.9	45.3
38:45	42.6	47.1	40.9	33.9	45.4
39: 0	42.7	47.1	41.0	34.1	45.6
39:15	42.8	47.3	41.1	34.1	45.7
39:30	42.9	47.3	41.2	34.2	45.7
39:45	43.1	47.5	41.4	34.4	46.0
40: 0	43.1	47.6	41.5	34.4	46.1
40:15	43.4	48.0	41.7	34.6	46.2

**COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
40:30	43.5	48.0	41.9	34.8	46.5
40:45	43.5	48.1	41.9	34.8	46.5
41: 0	44.0	48.5	42.3	35.2	46.8
41:15	44.2	48.7	42.5	35.4	47.1
41:30	44.6	49.1	42.9	35.7	47.5
41:45	45.2	49.8	43.3	36.2	48.0
42: 0	45.3	50.0	43.6	36.4	48.3
42:15	45.7	50.5	43.8	36.7	48.6
42:30	45.8	50.5	44.1	36.8	48.7
42:45	45.9	50.7	44.2	37.0	48.8
43: 0	46.1	50.8	44.4	37.1	49.2
43:15	46.1	51.0	44.5	37.3	49.4
43:30	46.3	51.3	44.7	37.5	49.4
43:45	46.6	51.4	44.9	37.6	49.7
44: 0	46.7	51.6	45.0	37.8	49.8
44:15	46.8	51.9	45.3	38.0	50.3
44:30	46.9	51.9	45.4	38.1	50.2
44:45	47.1	52.2	45.5	38.2	50.5
45: 0	47.0	52.1	45.7	38.3	50.6
45:15	47.4	52.2	45.8	38.4	50.7
45:30	47.6	52.4	45.9	38.6	50.9
45:45	47.7	52.6	46.0	38.6	51.0
46: 0	47.8	52.7	46.0	38.7	50.8
46:15	47.8	52.6	46.0	38.7	50.8
46:30	47.8	52.7	46.1	38.7	50.9
46:45	47.9	52.9	46.2	38.7	51.0
47: 0	48.0	52.7	46.3	38.8	50.9

COAST GUARD
SURFACE HEAT FLUX (kW/m²)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Rad 1	Rad 2	Rad 3	Rad 4	Rad 5
47:15	48.0	52.8	46.3	38.8	51.0
47:30	48.0	52.7	46.4	38.9	51.0
47:45	48.3	53.2	46.7	39.2	51.2
48: 0	48.7	53.5	47.0	39.5	51.4
48:15	48.5	53.6	47.3	39.6	51.3
48:30	47.5	56.2	48.1	39.8	48.8
48:45	45.7	56.8	45.2	36.4	41.7

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
0: 0	25.0	24.9	24.9	24.9	24.8
0:15	25.0	24.9	25.0	24.9	24.9
0:30	25.0	24.9	25.0	25.0	24.9
0:45	25.0	24.9	25.0	25.0	24.9
1: 0	25.0	24.9	25.0	25.0	24.9
1:15	25.0	24.9	25.0	25.0	24.9
1:30	25.0	24.9	25.0	25.0	24.9
1:45	25.0	24.9	25.0	25.0	24.9
2: 0	25.0	24.9	25.0	25.0	24.9
2:15	25.0	24.9	25.0	25.0	24.9
2:30	25.0	24.9	25.0	25.0	24.9
2:45	25.0	25.0	25.0	25.0	24.9
3: 0	25.0	24.9	25.0	25.0	24.9
3:15	25.0	25.0	25.0	25.0	24.9
3:30	25.1	25.0	25.0	25.0	24.9
3:45	25.1	25.0	25.0	25.0	24.9
4: 0	25.1	25.0	25.1	25.1	24.9
4:15	25.1	25.0	25.1	25.1	24.9
4:30	25.1	25.0	25.1	25.1	24.9
4:45	25.1	25.0	25.1	25.1	25.0
5: 0	25.1	25.0	25.1	25.1	25.0
5:15	25.2	25.1	25.2	25.1	25.0
5:30	25.2	25.1	25.2	25.2	25.0
5:45	25.2	25.1	25.2	25.2	25.0
6: 0	25.2	25.2	25.3	25.2	25.1
6:15	25.3	25.2	25.3	25.2	25.1
6:30	25.2	25.1	25.3	25.2	25.1

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
6:45	25.3	25.2	25.4	25.3	25.1
7: 0	25.3	25.2	25.4	25.3	25.1
7:15	25.3	25.3	25.4	25.4	25.1
7:30	25.4	25.3	25.5	25.4	25.1
7:45	25.4	25.3	25.5	25.4	25.2
8: 0	25.4	25.3	25.5	25.4	25.2
8:15	25.5	25.3	25.6	25.5	25.2
8:30	25.5	25.4	25.6	25.5	25.3
8:45	25.5	25.4	25.6	25.5	25.3
9: 0	25.6	25.4	25.7	25.6	25.3
9:15	25.5	25.4	25.7	25.6	25.3
9:30	25.6	25.5	25.7	25.6	25.3
9:45	25.6	25.5	25.8	25.6	25.3
10: 0	25.7	25.5	25.8	25.7	25.4
10:15	25.7	25.6	25.8	25.7	25.4
10:30	25.7	25.6	25.9	25.8	25.4
10:45	25.7	25.6	25.9	25.8	25.4
11: 0	25.8	25.6	26.0	25.8	25.5
11:15	25.8	25.7	26.0	25.9	25.5
11:30	25.9	25.7	26.0	25.9	25.5
11:45	25.9	25.7	26.1	25.9	25.5
12: 0	25.9	25.7	26.1	25.9	25.6
12:15	25.9	25.8	26.1	26.0	25.6
12:30	26.0	25.8	26.2	26.0	25.6
12:45	26.0	25.8	26.2	26.1	25.6
13: 0	26.0	25.8	26.2	26.1	25.7
13:15	26.0	25.8	26.2	26.1	25.7

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
13:30	26.1	25.9	26.3	26.1	25.7
13:45	26.1	25.9	26.3	26.2	25.7
14: 0	26.1	25.9	26.3	26.2	25.8
14:15	26.1	25.9	26.3	26.2	25.8
14:30	26.2	25.9	26.4	26.2	25.8
14:45	26.2	26.0	26.4	26.2	25.8
15: 0	26.2	26.0	26.4	26.3	25.9
15:15	26.3	26.0	26.5	26.3	25.9
15:30	26.3	26.1	26.5	26.3	25.9
15:45	26.3	26.1	26.5	26.3	25.9
16: 0	26.3	26.1	26.5	26.4	25.9
16:15	26.4	26.1	26.6	26.4	25.9
16:30	26.4	26.1	26.6	26.4	25.9
16:45	26.4	26.1	26.6	26.5	26.0
17: 0	26.4	26.2	26.7	26.5	26.0
17:15	26.5	26.2	26.7	26.6	26.0
17:30	26.5	26.3	26.7	26.6	26.1
17:45	26.6	26.3	26.8	26.6	26.1
18: 0	26.6	26.3	26.8	26.6	26.1
18:15	26.6	26.3	26.8	26.7	26.1
18:30	26.6	26.3	26.8	26.7	26.1
18:45	26.6	26.3	26.8	26.7	26.1
19: 0	26.6	26.3	26.9	26.7	26.1
19:15	26.6	26.3	26.9	26.7	26.2
19:30	26.6	26.3	26.8	26.7	26.2
19:45	26.6	26.3	26.9	26.7	26.2
20: 0	26.7	26.4	26.9	26.7	26.2

COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
20:15	26.7	26.3	26.9	26.7	26.2
20:30	26.7	26.4	26.9	26.7	26.2
20:45	26.7	26.4	26.9	26.8	26.2
21: 0	26.7	26.4	26.9	26.8	26.2
21:15	26.7	26.4	27.0	26.8	26.2
21:30	26.7	26.4	27.0	26.8	26.2
21:45	26.7	26.4	27.0	26.8	26.2
22: 0	26.7	26.4	27.0	26.9	26.2
22:15	26.8	26.4	27.1	26.9	26.2
22:30	26.8	26.4	27.0	26.9	26.2
22:45	26.8	26.4	27.0	26.9	26.3
23: 0	26.8	26.4	27.1	26.9	26.3
23:15	26.8	26.4	27.1	26.9	26.3
23:30	26.8	26.4	27.0	26.9	26.3
23:45	26.8	26.4	27.1	26.9	26.3
24: 0	26.8	26.4	27.1	26.9	26.3
24:15	26.8	26.4	27.1	26.9	26.3
24:30	26.9	26.5	27.2	27.0	26.3
24:45	26.9	26.5	27.1	27.0	26.3
25: 0	26.9	26.5	27.2	27.0	26.3
25:15	26.9	26.5	27.2	27.0	26.4
25:30	26.9	26.5	27.2	27.1	26.4
25:45	26.9	26.5	27.2	27.0	26.3
26: 0	26.9	26.5	27.3	27.1	26.4
26:15	26.9	26.5	27.3	27.1	26.4
26:30	27.0	26.6	27.3	27.1	26.4
26:45	27.0	26.5	27.3	27.1	26.4

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
27: 0	27.0	26.6	27.3	27.1	26.5
27:15	27.0	26.6	27.4	27.2	26.5
27:30	27.0	26.6	27.4	27.2	26.5
27:45	27.1	26.6	27.4	27.2	26.5
28: 0	27.1	26.6	27.4	27.2	26.5
28:15	27.1	26.6	27.5	27.2	26.5
28:30	27.1	26.7	27.5	27.3	26.5
28:45	27.1	26.7	27.5	27.3	26.6
29: 0	27.1	26.7	27.6	27.4	26.6
29:15	27.2	26.7	27.6	27.4	26.6
29:30	27.2	26.7	27.6	27.4	26.6
29:45	27.2	26.7	27.6	27.4	26.6
30: 0	27.2	26.7	27.6	27.4	26.6
30:15	27.3	26.8	27.7	27.5	26.6
30:30	27.2	26.7	27.6	27.4	26.7
30:45	27.3	26.8	27.6	27.4	26.7
31: 0	27.3	26.8	27.7	27.5	26.7
31:15	27.3	26.8	27.6	27.5	26.7
31:30	27.3	26.8	27.7	27.4	26.7
31:45	27.4	26.8	27.8	27.6	26.7
32: 0	27.4	26.9	27.8	27.6	26.8
32:15	27.4	26.9	27.8	27.6	26.8
32:30	27.4	26.9	27.8	27.7	26.8
32:45	27.4	26.9	27.9	27.7	26.8
33: 0	27.5	26.9	27.9	27.7	26.8
33:15	27.5	26.9	27.9	27.7	26.8
33:30	27.5	27.0	27.9	27.7	26.9

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
33:45	27.6	27.0	27.9	27.8	26.9
34: 0	27.5	27.0	27.9	27.7	26.9
34:15	27.6	27.0	28.0	27.8	26.9
34:30	27.6	27.0	28.0	27.8	27.0
34:45	27.6	27.0	28.0	27.8	27.0
35: 0	27.6	27.1	28.0	27.8	27.0
35:15	27.6	27.1	28.1	27.8	27.0
35:30	27.7	27.1	28.0	27.8	27.0
35:45	27.7	27.1	28.1	27.9	27.0
36: 0	27.7	27.1	28.1	27.9	27.0
36:15	27.7	27.1	28.1	27.9	27.0
36:30	27.8	27.2	28.2	28.0	27.1
36:45	27.8	27.2	28.2	28.0	27.1
37: 0	27.8	27.2	28.3	28.0	27.1
37:15	27.8	27.2	28.3	28.1	27.2
37:30	27.8	27.2	28.3	28.0	27.1
37:45	27.8	27.2	28.3	28.1	27.2
38: 0	27.9	27.3	28.3	28.1	27.2
38:15	27.9	27.3	28.3	28.2	27.2
38:30	27.9	27.3	28.4	28.2	27.2
38:45	27.9	27.3	28.4	28.2	27.3
39: 0	27.9	27.3	28.4	28.2	27.2
39:15	27.9	27.3	28.4	28.2	27.2
39:30	28.0	27.4	28.4	28.2	27.3
39:45	27.9	27.3	28.4	28.2	27.3
40: 0	28.0	27.4	28.5	28.3	27.3
40:15	28.0	27.4	28.5	28.3	27.3

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
40:30	28.1	27.4	28.6	28.3	27.3
40:45	28.1	27.4	28.5	28.4	27.3
41: 0	28.0	27.5	28.5	28.4	27.4
41:15	28.1	27.5	28.6	28.5	27.4
41:30	28.1	27.5	28.6	28.5	27.4
41:45	28.1	27.5	28.7	28.5	27.4
42: 0	28.1	27.6	28.8	28.6	27.4
42:15	28.1	27.5	28.7	28.5	27.4
42:30	28.1	27.6	28.7	28.6	27.5
42:45	28.2	27.6	28.8	28.6	27.5
43: 0	28.3	27.6	28.8	28.6	27.5
43:15	28.2	27.6	28.8	28.6	27.5
43:30	28.3	27.6	28.8	28.6	27.6
43:45	28.2	27.6	28.8	28.6	27.5
44: 0	28.3	27.6	28.8	28.6	27.5
44:15	28.3	27.7	28.8	28.7	27.6
44:30	28.3	27.7	28.9	28.7	27.6
44:45	28.3	27.7	28.9	28.7	27.6
45: 0	28.4	27.7	29.0	28.8	27.6
45:15	28.3	27.7	28.9	28.7	27.6
45:30	28.5	27.7	29.0	28.8	27.7
45:45	28.4	27.7	28.9	28.8	27.6
46: 0	28.4	27.7	29.0	28.8	27.6
46:15	28.4	27.7	29.0	28.8	27.7
46:30	28.4	27.8	28.9	28.7	27.6
46:45	28.5	27.7	28.9	28.7	27.7
47: 0	28.5	27.8	29.0	28.9	27.6

**COAST GUARD
HEAT FLUX BODY TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Tr 1	Tr 2	Tr 3	Tr 4	Tr 5
47:15	28.5	27.7	29.0	28.8	27.7
47:30	28.5	27.8	29.1	28.9	27.7
47:45	28.6	27.8	29.1	28.9	27.7
48: 0	28.5	27.8	29.1	28.9	27.7
48:15	28.6	27.8	29.1	28.9	27.7
48:30	28.5	27.8	29.1	28.9	27.7
48:45	28.6	27.8	29.1	28.9	27.8

**COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
0: 0	28.7	28.8	28.5	28.7	28.8	28.6	28.4	28.6	28.2	28.3	28.2
0:15	29.0	29.1	29.3	29.0	29.3	29.1	28.9	28.9	28.7	28.5	28.2
0:30	31.5	31.6	31.1	31.9	32.4	32.3	31.6	32.1	31.6	28.6	28.4
0:45	38.4	38.5	35.9	39.4	40.4	39.9	37.7	39.1	38.2	29.0	28.7
1: 0	47.4	47.9	43.8	48.9	50.2	49.7	45.4	48.1	46.9	29.8	29.4
1:15	55.8	57.1	52.8	58.2	59.7	59.6	52.9	57.0	55.5	31.3	30.7
1:30	63.5	65.4	61.7	66.8	68.3	68.8	60.1	65.3	63.9	33.5	32.7
1:45	71.6	73.3	71.1	75.6	77.0	78.1	67.3	74.0	72.8	36.1	35.3
2: 0	80.7	82.1	81.3	86.1	87.0	89.2	76.3	84.2	83.2	39.3	38.5
2:15	91.3	92.4	92.7	98.4	98.7	101.9	86.9	95.9	95.0	42.8	42.3
2:30	102.8	103.4	104.3	111.6	111.3	114.0	98.5	108.3	107.1	46.5	46.3
2:45	114.7	114.7	115.8	123.3	123.0	127.7	108.1	120.2	118.9	50.3	50.2
3: 0	125.8	126.0	127.7	135.4	133.5	140.9	117.4	131.7	130.5	54.2	55.0
3:15	136.8	137.2	140.0	147.5	145.6	153.7	126.2	142.2	142.3	59.4	60.2
3:30	146.0	148.6	153.1	160.0	157.8	166.8	135.0	154.0	155.1	64.8	65.5
3:45	159.5	160.8	165.3	173.0	170.8	180.8	146.9	166.8	168.5	70.3	71.5
4: 0	173.1	173.7	179.5	186.6	184.2	195.0	160.2	180.2	182.4	76.2	77.6
4:15	186.6	187.0	192.9	200.4	198.1	208.4	172.3	194.4	196.2	82.5	84.3
4:30	199.6	201.6	208.0	213.5	212.4	222.9	185.5	208.0	210.1	89.3	91.5

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
4:45	212.6	216.2	222.7	227.2	227.4	237.4	198.6	222.1	223.7	96.1	99.1
5: 0	225.4	230.5	235.6	240.4	241.8	252.2	210.8	236.2	237.3	103.5	107.7
5:15	238.3	243.9	250.8	254.0	255.8	266.0	223.0	250.1	250.7	111.1	115.6
5:30	251.0	257.2	264.0	267.4	269.7	280.1	235.2	263.8	264.1	119.0	124.3
5:45	263.6	270.6	276.7	280.3	283.3	294.6	246.8	277.1	277.9	127.3	134.5
6: 0	276.0	283.6	290.4	293.5	297.3	309.0	259.4	290.3	291.4	135.6	143.5
6:15	288.8	296.1	304.0	306.4	311.4	323.9	271.4	303.5	304.8	144.6	152.5
6:30	301.5	308.5	319.0	318.9	325.0	338.4	282.8	316.9	318.2	153.6	160.8
6:45	313.4	321.3	332.5	332.2	338.3	352.3	295.5	330.3	331.9	162.5	170.1
7: 0	325.8	334.0	346.9	345.6	351.9	366.4	308.2	343.6	345.5	171.2	178.4
7:15	338.4	347.3	361.8	359.5	365.6	380.4	319.9	356.8	359.2	179.7	186.3
7:30	350.4	360.5	374.6	373.6	379.1	394.0	331.4	370.2	373.0	188.2	194.4
7:45	362.0	375.1	386.8	388.4	391.9	406.5	343.8	383.3	387.1	196.3	202.2
8: 0	375.4	388.1	396.9	402.6	404.3	417.6	357.0	396.0	400.3	203.8	209.6
8:15	388.6	400.3	407.0	415.0	415.6	426.5	367.9	407.7	413.4	211.7	216.3
8:30	400.2	412.3	416.2	424.7	426.0	433.9	378.8	418.7	425.4	218.8	222.8
8:45	411.3	422.2	423.0	432.1	434.9	440.6	389.4	428.1	435.1	225.9	229.1
9: 0	421.2	431.9	427.1	437.9	442.5	447.3	399.6	435.6	442.4	232.5	235.9
9:15	430.0	438.7	432.5	442.7	448.8	453.3	407.2	441.7	448.1	239.5	242.3

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
9:30	437.1	444.9	437.0	447.1	454.8	459.6	412.7	447.3	453.1	245.6	248.5
9:45	444.5	450.1	443.5	451.4	460.2	465.1	417.2	452.7	458.3	252.3	253.5
10: 0	450.4	456.0	450.7	455.9	465.2	470.5	420.3	458.0	463.8	258.6	258.9
10:15	455.4	462.5	457.1	460.7	470.8	476.1	425.9	463.4	468.9	264.2	264.5
10:30	460.3	467.9	463.2	465.7	476.3	482.0	432.3	468.3	474.0	269.5	269.5
10:45	465.3	474.0	469.4	470.1	481.4	487.2	436.6	473.3	479.0	274.9	275.3
11: 0	470.8	478.7	474.7	473.6	485.8	491.9	440.2	478.2	483.7	280.6	280.4
11:15	477.0	482.3	477.3	477.6	490.2	495.5	444.5	482.8	488.5	286.5	285.8
11:30	482.3	485.4	480.2	481.7	494.2	499.9	448.2	487.1	492.6	292.2	291.3
11:45	486.0	490.1	484.2	485.2	498.6	504.1	452.3	491.3	497.1	297.2	294.7
12: 0	490.4	494.7	487.0	489.0	502.7	507.3	455.8	495.5	500.8	302.6	300.2
12:15	495.2	497.9	488.9	492.9	506.1	511.1	459.2	499.7	504.7	308.1	306.0
12:30	499.0	501.7	495.0	496.5	509.3	514.6	461.8	503.6	508.6	313.3	310.1
12:45	502.2	507.1	499.9	499.2	513.3	518.5	467.1	507.1	512.2	317.4	314.2
13: 0	506.4	510.0	504.4	502.5	516.4	521.8	470.6	510.4	515.6	321.9	318.6
13:15	510.4	512.6	507.2	506.0	519.3	524.7	474.2	513.7	518.8	326.8	321.8
13:30	513.6	515.9	510.5	509.2	522.7	527.8	478.5	517.1	522.1	330.8	326.1
13:45	515.5	519.1	513.3	512.5	526.2	531.0	481.9	520.2	524.9	334.4	329.7
14: 0	518.2	521.7	516.2	515.2	529.0	534.1	485.4	523.0	528.3	338.5	333.4

**COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
14:15	521.1	524.3	518.8	519.5	531.9	537.0	489.9	525.8	531.4	341.9	336.9
14:30	524.1	526.0	519.5	522.6	535.0	539.7	493.4	528.2	534.1	344.9	340.8
14:45	526.2	528.7	522.8	525.2	537.4	542.6	496.1	531.2	537.1	348.2	345.1
15: 0	529.3	530.2	525.1	527.8	539.6	545.3	498.5	533.8	539.7	351.9	349.4
15:15	532.0	532.2	526.1	529.8	541.7	547.7	498.3	536.1	542.0	356.4	353.7
15:30	533.6	534.5	528.6	532.3	544.3	550.1	501.5	538.9	544.7	360.0	356.6
15:45	536.6	536.3	529.1	534.9	546.9	552.0	504.3	541.5	547.6	363.5	360.2
16: 0	539.4	538.7	531.2	537.4	549.2	554.3	506.6	543.8	549.9	367.2	364.0
16:15	542.0	540.6	532.6	540.4	551.3	556.3	510.9	546.4	552.3	370.5	368.8
16:30	545.1	542.2	535.4	542.6	553.2	558.7	511.0	548.7	554.9	373.8	372.0
16:45	546.9	545.2	539.3	545.6	555.6	560.8	515.0	551.1	557.7	376.7	375.2
17: 0	549.8	546.6	542.8	548.4	558.1	563.2	514.7	553.7	560.3	380.7	378.2
17:15	551.5	548.7	544.4	551.0	560.0	565.2	515.9	556.3	562.9	384.3	381.4
17:30	553.9	551.1	546.3	553.7	562.5	567.0	518.6	558.7	565.3	387.1	384.4
17:45	556.8	552.7	547.5	555.7	564.9	569.5	522.2	561.1	567.8	390.1	388.1
18: 0	559.3	554.6	550.5	557.6	566.8	571.4	524.9	563.3	570.5	392.8	391.0
18:15	561.2	557.1	554.1	560.0	569.0	573.7	526.5	565.7	573.2	395.1	394.0
18:30	563.0	559.0	555.5	562.5	571.0	575.8	528.9	568.2	575.8	397.5	397.3
18:45	565.0	561.2	558.4	564.7	573.3	577.7	534.5	570.8	578.2	399.0	400.4

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
19: 0	567.7	562.8	560.3	566.8	575.1	579.3	535.2	573.2	580.9	402.1	402.9
19:15	569.8	566.5	562.2	568.5	577.4	581.0	537.5	575.1	583.2	403.6	406.7
19:30	571.2	570.8	565.9	570.6	579.3	583.1	540.1	577.6	585.1	404.5	410.1
19:45	572.7	573.1	568.8	572.7	581.3	585.5	543.3	579.9	587.3	405.4	413.0
20: 0	574.8	574.8	569.7	574.8	582.9	587.0	546.6	582.2	589.0	406.8	415.6
20:15	576.7	575.0	571.0	575.9	583.9	588.5	546.3	584.1	591.0	409.5	418.8
20:30	579.0	575.8	569.8	578.1	585.4	590.4	547.0	585.8	592.6	412.9	422.3
20:45	580.0	577.7	572.4	580.2	587.0	592.0	550.1	588.2	594.8	414.7	424.6
21: 0	582.2	580.2	575.9	582.2	589.0	594.1	553.1	590.6	597.1	416.4	427.8
21:15	583.9	584.0	578.7	584.4	590.9	596.3	556.6	593.5	599.5	417.8	431.0
21:30	586.1	586.6	582.4	586.5	593.2	599.3	559.1	596.3	601.8	419.0	432.9
21:45	589.5	586.6	581.8	588.2	594.4	601.2	559.9	598.8	604.1	421.9	436.7
22: 0	591.6	588.4	586.2	590.2	596.4	603.6	560.7	601.3	606.3	425.0	439.3
22:15	592.8	590.3	589.4	592.1	598.4	606.0	563.5	604.0	608.3	427.5	441.4
22:30	595.0	592.6	590.5	594.0	600.6	607.6	568.4	606.7	610.5	429.2	444.7
22:45	597.1	594.2	592.7	595.5	602.1	609.5	569.7	608.8	612.3	431.6	447.2
23: 0	599.3	596.1	593.2	597.0	603.3	611.1	569.9	610.9	614.5	434.5	449.7
23:15	600.0	599.3	597.7	598.7	605.9	613.9	572.5	613.4	616.8	435.6	452.6
23:30	601.6	603.3	600.5	600.7	607.9	616.3	577.9	616.1	619.6	436.7	455.5

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
23:45	604.0	604.8	602.5	602.0	609.7	618.4	578.0	619.1	621.9	438.8	457.1
24: 0	605.8	606.0	602.4	604.1	611.2	620.3	581.4	621.7	623.9	440.6	459.0
24:15	607.6	607.3	605.5	606.5	613.1	622.6	580.4	624.1	626.3	443.2	461.5
24:30	609.6	609.8	608.0	607.9	615.2	624.8	583.0	626.5	628.4	445.7	462.3
24:45	611.9	612.7	609.1	609.5	617.5	627.2	585.9	628.5	630.6	447.3	464.1
25: 0	613.3	613.2	611.2	610.9	619.2	629.0	586.1	630.8	632.6	449.7	465.6
25:15	614.4	615.1	613.6	612.9	620.9	631.5	587.8	633.1	634.4	451.8	468.0
25:30	615.8	617.2	615.2	614.6	623.3	633.6	589.6	635.2	636.1	453.2	469.8
25:45	618.0	617.9	616.4	616.2	624.5	635.6	592.0	637.3	638.2	455.5	470.3
26: 0	619.7	619.2	618.4	618.0	626.0	637.4	591.7	639.0	640.1	457.5	472.0
26:15	620.1	622.2	620.2	618.9	627.6	639.4	594.7	640.9	642.2	458.1	473.9
26:30	621.4	624.3	621.4	620.1	629.0	641.2	597.3	642.4	643.9	459.1	475.5
26:45	623.7	624.6	623.6	621.0	630.2	643.0	598.5	643.9	645.6	461.7	476.7
27: 0	625.4	625.3	624.1	622.8	631.4	645.5	599.9	645.7	647.2	464.3	477.6
27:15	626.5	626.7	626.2	624.5	633.5	647.2	601.2	647.5	649.2	466.0	479.0
27:30	629.0	628.4	627.5	626.4	635.1	649.6	603.0	649.5	650.9	468.4	480.6
27:45	630.8	629.3	628.7	628.1	636.5	651.3	605.5	651.3	653.0	470.6	481.9
28: 0	631.6	630.8	631.3	629.4	638.3	653.6	607.0	653.2	654.9	471.7	483.0
28:15	632.9	633.7	634.7	631.1	640.4	656.4	609.8	654.7	657.0	472.1	484.9

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
28:30	634.7	636.4	636.0	632.5	642.3	658.2	611.7	656.4	658.7	472.4	485.9
28:45	636.5	638.6	637.4	633.8	644.1	660.0	613.3	657.9	660.8	473.0	487.7
29: 0	638.4	639.2	637.3	636.0	645.5	661.3	615.9	659.9	662.4	474.2	488.5
29:15	639.9	641.2	639.1	637.8	647.5	663.4	618.4	661.6	664.1	475.4	489.4
29:30	641.8	641.0	641.2	639.5	648.3	665.1	618.9	663.2	665.9	477.6	490.7
29:45	643.2	642.8	642.2	641.0	650.0	667.1	620.4	665.0	667.8	479.3	491.1
30: 0	644.4	645.6	644.6	642.9	652.2	669.3	622.3	666.8	669.7	479.9	491.8
30:15	647.0	646.6	644.5	644.7	653.6	670.4	624.3	668.4	672.2	481.8	493.8
30:30	648.7	647.7	645.4	646.3	655.2	672.0	625.8	670.2	674.1	483.6	493.9
30:45	650.7	648.0	646.3	648.4	656.4	673.2	626.9	671.8	675.5	485.8	494.8
31: 0	651.7	649.2	649.5	650.5	658.5	675.3	629.6	673.1	677.4	486.6	497.0
31:15	654.3	652.4	650.0	652.7	659.9	676.6	634.5	675.0	678.8	487.2	497.1
31:30	654.4	654.8	651.6	653.6	661.5	677.8	634.8	676.3	679.9	487.8	498.2
31:45	655.9	654.1	652.3	654.1	662.3	678.7	633.1	677.7	681.0	489.7	499.0
32: 0	657.9	655.8	653.6	655.8	663.5	680.1	636.2	679.3	682.7	491.3	500.6
32:15	659.8	657.6	655.6	657.9	665.6	681.6	638.9	680.8	684.6	492.3	502.7
32:30	660.2	658.5	656.3	658.8	666.8	682.9	637.5	682.5	686.0	494.3	504.2
32:45	662.2	659.4	658.5	660.5	668.3	684.1	640.6	684.1	687.7	496.0	504.9
33: 0	663.5	661.3	660.2	662.8	670.5	686.1	642.4	685.4	689.6	497.1	506.6

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
33:15	665.6	661.9	660.8	664.6	671.9	687.6	643.3	687.3	691.5	499.7	506.6
33:30	667.2	663.6	662.0	666.3	673.5	689.3	645.2	688.9	694.0	502.1	508.2
33:45	668.3	663.9	662.1	667.7	674.8	691.1	646.4	690.4	695.7	504.2	508.1
34: 0	670.8	665.3	663.4	670.6	676.6	692.9	648.6	692.0	697.9	506.4	510.0
34:15	672.4	666.5	666.1	672.2	678.0	694.7	649.6	693.5	699.9	508.7	512.6
34:30	673.7	668.8	666.8	673.7	679.4	696.5	650.7	695.1	701.6	510.7	513.1
34:45	675.7	669.8	668.4	675.7	680.8	698.6	652.3	696.9	703.8	513.1	514.0
35: 0	677.4	672.3	670.4	677.7	683.4	700.7	653.8	698.7	705.7	514.7	515.9
35:15	680.1	672.6	670.8	679.2	684.2	704.2	655.4	700.6	707.5	517.4	518.3
35:30	681.5	675.0	673.3	680.8	686.1	707.2	656.1	702.0	709.0	519.2	519.0
35:45	683.2	676.2	674.7	682.6	688.1	709.3	659.6	703.6	710.5	520.0	520.9
36: 0	685.0	678.7	677.3	684.0	689.9	711.0	661.0	705.0	711.9	521.1	522.8
36:15	686.4	679.6	677.5	685.1	691.3	711.7	662.0	706.4	713.2	522.5	524.9
36:30	687.2	679.7	679.1	686.1	691.6	712.9	660.5	707.7	713.8	525.3	525.6
36:45	688.0	680.2	680.2	687.1	692.3	713.9	661.4	708.8	714.5	527.7	526.1
37: 0	690.0	680.5	680.1	688.4	693.3	714.3	661.5	709.8	715.3	530.8	527.4
37:15	690.9	682.6	683.1	689.3	694.5	715.2	662.9	710.5	716.1	532.2	529.3
37:30	691.9	684.3	684.0	690.9	695.9	715.4	666.5	711.6	716.7	533.1	531.0
37:45	692.8	685.2	686.5	692.2	696.8	717.0	668.0	712.5	717.9	534.2	532.2

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
38: 0	693.6	686.1	686.3	693.9	698.0	716.9	668.8	713.9	718.3	535.0	533.1
38:15	694.7	686.8	688.4	695.0	698.3	717.4	669.4	714.6	718.8	536.4	534.2
38:30	696.2	687.7	689.1	696.6	699.3	717.1	671.5	715.3	719.7	537.9	535.9
38:45	697.2	688.6	690.8	697.7	700.0	718.0	671.6	716.0	720.2	539.0	537.0
39: 0	697.8	689.0	691.3	698.1	700.0	718.1	671.1	716.4	721.0	540.8	537.9
39:15	698.9	690.0	691.6	699.3	700.6	718.4	671.8	717.1	721.3	542.0	538.9
39:30	699.5	690.5	693.0	700.3	701.9	719.1	673.7	717.8	722.3	542.8	540.7
39:45	700.6	690.9	693.6	701.5	701.8	719.5	676.1	718.5	722.9	543.7	540.8
40: 0	701.2	692.0	694.7	702.5	702.8	719.5	677.2	719.1	723.4	544.2	541.9
40:15	702.0	691.4	696.0	702.8	703.1	719.8	675.0	719.9	724.2	545.3	542.7
40:30	702.6	692.6	697.2	704.0	703.9	719.6	675.9	720.8	725.2	545.6	543.4
40:45	703.4	692.3	697.0	704.6	704.1	719.3	675.0	721.4	725.8	547.1	543.2
41: 0	703.8	693.0	696.9	705.1	705.0	720.0	675.2	722.1	726.5	548.6	544.1
41:15	705.4	694.0	699.0	706.0	705.6	720.8	675.6	723.0	727.9	549.8	545.6
41:30	707.0	694.8	700.8	707.2	707.5	721.4	677.1	724.1	729.0	551.3	547.3
41:45	708.8	696.8	703.4	708.8	708.9	722.1	677.9	725.4	730.9	552.4	548.3
42: 0	709.2	697.9	705.9	710.3	710.7	724.3	678.2	727.1	732.3	553.7	549.2
42:15	711.1	699.9	707.2	712.1	712.3	725.1	679.9	728.8	733.9	555.1	549.9
42:30	712.6	700.8	708.4	713.7	714.0	726.2	681.5	730.3	735.5	556.7	552.3

COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3

DATE: 27 MAY 1993
FILE: 147CG-3.DAT

SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(I3)

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
42:45	713.6	701.5	709.7	715.3	715.3	726.6	681.7	731.5	736.9	558.0	552.9
43: 0	714.9	702.2	709.0	717.1	716.4	727.2	682.9	732.7	738.2	559.9	553.8
43:15	716.1	702.9	709.0	718.2	717.5	727.8	684.4	733.7	739.3	561.7	554.4
43:30	717.7	704.1	708.9	719.6	718.7	728.5	687.2	734.8	740.6	563.1	555.4
43:45	719.0	705.3	710.2	721.6	720.6	729.3	690.1	735.9	742.0	563.8	557.3
44: 0	720.3	705.8	710.3	722.0	720.9	728.9	691.2	736.7	743.7	564.8	558.9
44:15	721.1	706.6	710.5	722.7	721.4	729.5	691.7	737.9	744.8	566.0	559.4
44:30	722.6	707.1	710.0	723.3	722.1	729.7	692.1	738.6	746.0	567.6	559.8
44:45	723.1	708.2	709.9	724.2	723.1	730.0	693.8	739.7	746.9	568.7	562.1
45: 0	724.1	709.2	709.0	725.6	724.0	730.2	696.3	740.8	747.6	569.9	562.1
45:15	724.3	709.5	708.7	726.2	724.6	731.1	694.7	741.4	748.5	571.0	562.4
45:30	724.2	710.0	708.1	726.7	725.3	731.1	695.8	741.9	749.5	571.6	564.8
45:45	724.8	710.6	709.1	727.8	726.2	731.2	698.3	742.7	750.4	572.2	565.8
46: 0	724.8	711.8	709.7	727.8	726.8	731.5	697.8	743.0	750.9	573.1	566.0
46:15	724.7	711.9	708.8	727.9	726.9	731.6	697.4	743.0	751.6	573.7	566.9
46:30	724.8	712.3	709.8	729.0	727.6	731.3	699.5	743.2	752.1	574.2	567.2
46:45	724.0	712.0	709.1	729.1	727.9	731.5	698.7	743.2	752.9	574.5	569.6
47: 0	725.9	712.0	710.7	729.6	728.3	731.8	700.3	743.4	753.3	576.0	569.0
47:15	725.7	712.0	710.0	730.0	728.6	731.0	700.5	743.5	753.6	576.9	569.8

**COAST GUARD
SURFACE TEMPERATURES (°C)
TEST NO. 3**

**DATE: 27 MAY 1993
FILE: 147CG-3.DAT**

**SWRI PROJECT NO.: 01-5592
TEST TYPE: IMO RES.A.517(13)**

MIN:SEC	Ts 1	Ts 2	Ts 3	Ts 4	Ts 5	Ts 6	Ts 7	Ts 8	Ts 9	Ts 10	Ts 11
47:30	725.7	712.5	712.7	730.3	728.7	731.8	697.1	743.3	753.7	578.1	570.5
47:45	725.7	712.6	714.6	730.5	728.6	731.3	696.3	743.0	754.2	579.1	570.8
48: 0	726.5	713.4	715.3	731.6	729.4	730.6	699.0	742.9	755.2	579.6	573.3
48:15	727.3	714.3	716.9	731.9	729.8	731.1	699.3	743.4	755.5	580.5	574.5
48:30	726.6	713.4	718.1	731.7	700.8	728.9	699.9	742.4	754.8	580.2	577.2
48:45	722.5	708.2	708.6	724.6	0.0	721.2	692.8	733.7	747.1	580.0	590.7